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AUTHOR	Heermann, Barry
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ABSTRACT

This monograph argues the need for incorporating experiential learning of many types into two-year college education. Experiential learning falls into two broad categories, learning through life experience or nonsponsored prior learning, and sponsored learning which is incorporated into institutional programs designed to give students direct experience in integrating and applying knowledge. Several examples are used to illustrate the essential components of sponsored programs and a detailed discussion on recognition, assessment, and crediting nonsponsored experiential learning is given. It is noted that accepting the idea that learning takes place in locations other than the college campus is one thing while providing opportunities for such education is quite another. Specific requirements for a successful sponsored learning program include but are not limited to careful planning, systems design, energy, enthusiasm, and the knowledge, skills, attitudes, and support of faculty, counselors, administrators, and other participants. The College Without Walls at Sinclair Community College (Ohio) is described to illustrate the operation of a comprehensive experiential learning program. Experiential learning assessment forms are appended and a bibliography is included. (JDS)

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EXPERIENTIAL LEARNING IN THE COMMUNITY COLLEGE

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EXPERIENTIAL LEARNING IN THE COMMUNITY COLLEGE

by

Barry Heermann

Director, Experiential Based Education
Sinclair Community College
Dayton, Ohio

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ERIC Clearinghouse for Junior Colleges
University of California
Los Angeles 90024

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A RATIONALE

> *Practice and theoretical study should be like the blades of a pair of shears, neither blade is good for anything by itself, but they cut by being in contact with each other. Conventional education has been, like shears with only one blade--that of theoretical education.*
>
> *Arthur Morgan (1970)*

Not seeing the forest for the trees is the bane of much community junior college education. Because the time and energies of two-year college educators have been severely taxed by serving expanding student populations in traditional ways, exploring forests has seldom been possible. But those who do consider the larger view find that the forest contains trees they had overlooked--that nontraditional education deserves a much fuller exploration and exploitation.

Morris Keeton observes:

> "The post secondary learning of the future will and should differ markedly from that of today in content and meaning, in timing and accessibility to learners, in systems through which instructional services are delivered, in the balance between experiential learning and information processing, and in the ways it is combined with other interests and activities of life" (1976, p. 5).

But that marked difference is not easily obtained. The phenomenal growth of the past two decades, the resulting complex bureaucracy, and the perceived need to educate in ways that are considered legitimate by the universities have served to stifle innovation.

At the same time, however, the absence of tradition, the commitment to adaptability, and the rhetoric of open-door admissions and service to nontraditional clienteles have facilitated some forward motion. The need to help a variety of students has been a particular impetus to change. Moore (1970), Roueche and Kirk (1973), and others forcefully drew attention to "revolving door" curricula wherein heterogeneous student populations were "served up" homogeneous educational programming. The whole developmental education movement that resulted helped us recognize that students vary greatly in the ways

they learn.

For many, an education which is less abstract, highly participatory, and experiential is of greater pertinence to their lives and learning styles. This kind of education is here referred to as experience-based education or experiential education, despite some objections to these terms. As Lyons sees it, for example:

> "The phrase 'experiential learning' is redundant. Most of us would never say 'wet water' or 'physical sex,' but we seem very comfortable discussing experiential learning, tacitly acknowledging that there is some other kind. There isn't. To understand or realize something new means that it becomes part of our own individual foundation; we have made it real. This is experience. This is learning" (1972, p. 21).

Although his points are well taken, these terms will be used in these pages to designate learning that differs from the traditional lecture mode and that usually happens outside the colleges. Keeton graphically establishes a rationale for experience-based education while getting at the essential differences between traditional "book learning" and experiential learning.

> "If learning to fly an airplane, for example, is done through simulation, a prospective pilot may learn more safely, more inexpensively, and with adequate effectiveness for at least the first times than at the controls in actual flight under the scrutiny of an experienced pilot. While simulation is not as faithful to the realities of flight as would be a trip up to 35,000 feet altitude with a Boeing 747, it is a kind of experience, and as such is far more likely to produce a competent pilot in short order than would a process of reading books about flying. Reading is also experience; but it is experience of reading, not of flying. The most effective experience in learning is an experience of what is to be learned or of some relatively faithful approximation of the essentials of the learning sought" (1976, p. 3).

Tumin elaborates: "The contrast between nonexperiential and experiential learning is one between more and less abstract, and more and less linguistic, sets of symbols that are employed in the transactions in which learning takes place, whether in the classroom, at the mill bench, or on the golf course" (1976, p. 41).

Thus, in the broadest sense experience-based education is action oriented and not exclusive of any location. While it can be classroom-based, emphasis will be placed on off-campus settings via cooperative education, internship, paid or nonpaid practicum, community projects, field experiences that are part of on-campus courses, highly structured vocational cooperative education associated with technical programs, and volunteer service experiences. An additional component is learning from prior experiential learning. This variation has especially far-reaching educational implications and an immense potential for influencing the traditional campus-centered educational structure. What all these possibilities have in common is off-campus experience, either before or after matriculation.

That learning does not always take place effectively in classrooms, despite endless sitting, listening, note-taking, and "parroting-back" data, is well known. So it is ironic that for most two-year colleges a movement to experiential learning smacks of the avant-garde. In reality, it is a return to what Martorana and Kuhns (1975) call "action learnings," to the very foundation of education. As Weathersby and Henault observe:

> "Experiential learning...is thousands of years older than our current course-oriented process. Plato, Socrates, Aristotle, and other great thinkers of their day embraced a form of experiential learning (notably the dialogic method, with an emphasis on observation and personal discovery by trial and error) as the ideal process for arriving at the truth. It was not until the peak of Roman power that schools as we know them came into being. And it was not until the development of the monastic orders of the Christian church that the lecture-discussion form took shape to become what is currently termed traditional education. Even during this period, however, several forms of experiential education continued to exist in apprenticeships and internships" (1976, p. 131).

Cyril Houle (1976), in his revealing description of the history of experiential learning, points out that much of the current structure and design was cemented during the nineteenth century. And twentieth-century students don't always adapt to this pattern.

> "At least four overlapping kinds of students,...most of them adults, find that this nineteenth century model of post-secondary education does not yet work very well for them. The first is made up of people who gained their experience before they acquired their theory and who have learned the latter inductively, if at all. The second includes those individuals who prefer to guide their own learning or whose pattern of life requires such self-direction. The third is made up of people who want guided but personalized programs of study, usually including experiential learning. The fourth comprises a vast and heterogeneous collection of people, each of whom wants to compile a record of previous learning (courses, test results, successful work accomplishments, and other forms of assessment) into the basis for further study for a degree, believing that in this synergistic process the whole of their knowledge will become greater than the sum of its parts" (1976, p. 31).

This monograph responds to these four kinds of adult students in community college. It is also in response to younger students who can greatly benefit from alternation of on-campus and off-campus experience in cooperative education programs. Collectively these students provide a mandate for new interpretation for the locations and circumstances of learning.

Clearly, then, experience-based learning has a long and respectable history as well as obvious uses for many nontraditional students. It is an entirely valid educational form that connects to specific learning outcomes. It is not a student service activity or a sort of frill. In fact, experiential learning can be qualitatively superior to the more abstract learning associated with classroom teaching. Unfortunately, however, any educational mode which requires deviation from the college's traditional resource allocation process is viewed with great suspicion. And let's be realistic: two-thirds of the college's operating budget, in many colleges, is for a faculty inculcated with visions of ivy-covered walls, chalkboards, and lecture, lecture, lecture. Capital expenditures have supported the conventional assumptions about the way students learn--sitting in desks in pastel-painted rooms, reading, listening, and taking notes.

But is there a necessary link between schools and learning, as our local constituencies, passing levies for the community college's continual expansion, have assumed? Ivan Illich (1971) and others think not. As Illich sees it, real learning is largely self-directed and continuous, whereas schooling occurs only at designated times and is imposed by outside authorities for societal purposes. And formal schooling usually impedes genuine learning. Harnett concludes then, "that formal educational institutions are not necessary as learning contexts for some people (how many no one can say with assurance); and it therefore follows that these institutions should not be regarded as the only avenues to gaining recognition for educational growth and development" (1972, p. 16).

Patricia Cross makes some pertinent comments on this subject as well:

> "Ever since education became so important to society that it was given status as a special function with its own buildings and its own specialists, the separation of education from the normal routines of life has seemed natural and logical--perhaps even necessary--to us. We have become so accustomed to thinking of education as occurring at a defined period in our lives and at specified times and places that the notion of 'deschooling society' seems radical and unrealistic" (1973, p. 1).

She specifies certain "old assumptions" of questionable validity that serve only to restrict the learning of local community members.

(1) Good colleges are located in "college towns" away from the pressing realities of the city.

(2) Real learning takes place on the campus in the classroom of a professor who has recognized credentials.

(3) Young people are educated to take their place in society by completing their education before they assume the responsibilities of citizenship; adults have finished their education.

These assumptions reveal once more that so-called traditional education is too limited in several ways: in its locations and times, in its approaches, and in its purposes. The last of these--limited goals--can usefully be examined in relation to Benjamin

Bloom's well-known taxonomy of educational objectives (1956). In this very valuable construct, there are essentially three levels of learning:

- knowing
- applying
- evaluating.

Knowing is the recognition or recall of ideas, materials, or phenomena, the process of information storage and retrieval. Application involves the transfer of theory and principle to the business of everyday living and career practice. And evaluating, which includes both knowing and applying, is the process of assessing the appropriateness or success of the application.

Much traditional education is preoccupied with the storage and retrieval of data at the expense of learning to apply and evaluate knowledge. This unbalanced situation has been clearly revealed by the whole educational objectives movement which has swept our campuses. In classroom after classroom all across the country the definition of learning outcomes has brought to light the information-retrieval intents of the teaching process. It has caused us to be honest with ourselves about what we are doing, as well as to reconsider its advantages for students.

The current competency-based education movement has also helped us to realize that our bias is data--and often those data that are the most abstract and remote, as far as the practitioner is concerned. If we focus on the abilities required to achieve some standard of excellence, regardless of discipline or occupational sector, we see clearly that what we validate with paper and pencil tests may only imprecisely correspond to the capacities that experts in the field demonstrate in their performance.

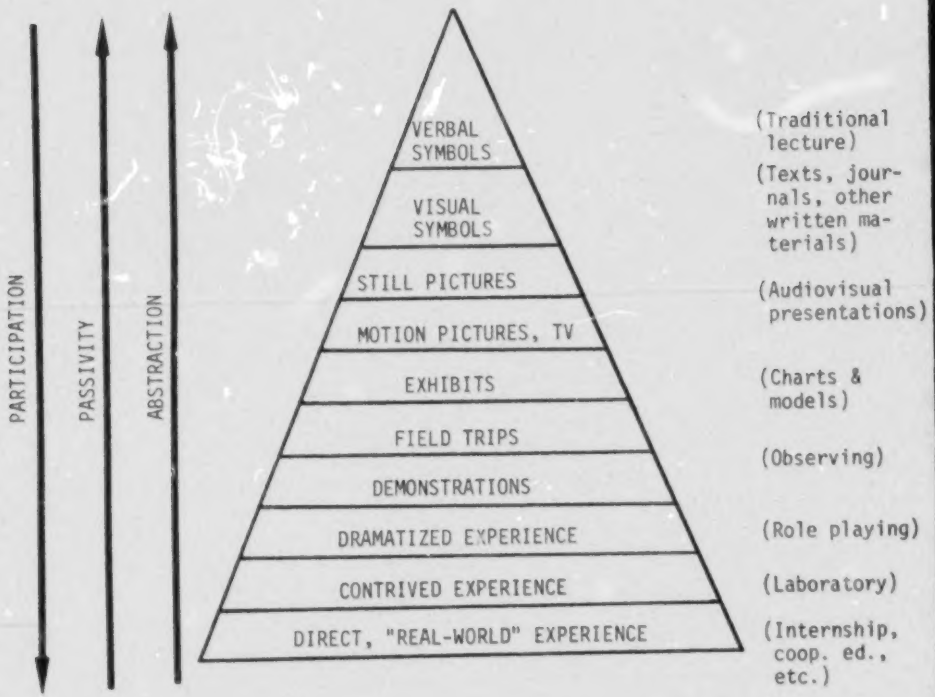
Those disciplines and career fields that depend heavily on interpersonal effectiveness, such as marketing, social work, teaching, sales, management, counseling, and communications, especially require more than book or lecture learning. Too often students are asked to store and retrieve data <u>about</u> interpersonal effectiveness instead

of actually doing it (see Breen, Donlon, and Whitaker, 1977b, for a fuller treatment of this subject). Even in those educational programs which properly stress psychomotor and/or data-recall skills, such as biology, typing, drafting, data processing, mathematics, and law, the ability to manage one's human relationships is frequently crucial to career adjustment and success. Yet often these curricula only incidentally develop these communication skills. Clearly in all these fields, experiential learning can contribute much.

Demonstrations of psychomotor skills, data recall and manipulation, and conceptualization under simulated conditions (by doing laboratory work or a case study, for example) are simply not the same as off-campus, actual work experience. Nevertheless, learning exercises on campus that move students from abstractions to concrete reality, an aspect of experiential learning, should be applauded. A look at Figure 1 of a modified version of Edgar Dale's "cone of experience" (1969) can help us see how "experiential" various teaching-learning modes are.

All of these modes of learning have their place, but in the recent past we have overemphasized the abstract and neglected the "hands-on" methods. Our need to contend with the knowledge explosion has led the colleges to stress the acquisition and retrieval of information, rather than its application and evaluation. In advocating a more balanced approach, I am not advocating anything new, as I suggested earlier. Since the beginning of time learning has been primarily experiential. Only in the past few moments in our history, which have been characterized by a preoccupation with mass education, has learning been primarily viewed as a product of classroom experiences. Yet the idea that learning from nonsimulated, nonclassroom, nonquiescent, real-world experiences might be superior to campus-based learning has received only the scantiest attention in the literature and, unfortunately, in the offices of higher education decision makers and federal bureaucrats. Advocates of experience-based learning, moving in union, can help to alter this mind set.

FIGURE 1
CONE OF EXPERIENCE



It is time once again for us to broaden our view of education, to promote learning wherever and whenever it may occur and by as direct means as possible. The simple wisdom of learning from experience is suggested by Harold Taylor in his foreword to Peter Meyer's Awarding College Credit for Non-College Learning.

> "If you want to ride a horse, dance a jig, climb a mountain, build a boat, write a novel, study history, think intelligently, become educated, a certain amount of instruction in a class in the subject will be useful--perhaps for two or three sessions. After that you will need to get a horse,

> start dancing, climbing, building, writing, thinking, and educating on your own. Otherwise you will not have learned what you need to know, that is, how in fact to do the thing you have set out to learn to do. To learn to do something it is necessary to practice it.
>
> "Although this is astonishingly clear as a general proposition, the entire American educational system is built on the opposite principle, that learning is done only through instruction and intervention by a teacher who explains, describes, instructs, and then certifies that the learner was present in a class while the explanations and descriptions were being given" (1975, pp. vii-viii).

Quite simply, experience-based education is the affirmation that learning can and does occur in a variety of experiential settings, with or without direct college supervision. I advocate greatly expanded experiential learning opportunities because as Morris Keeton has stated:

> "Our present educational practices do not fulfill our needs: they inadequately represent our current understanding of...the ways in which knowledge and competence can be achieved, recognized, and certified. It has long been recognized that knowledge without experiential content is not truly knowledge. 'Concepts without percepts are empty; percepts without concepts are blind,' as Kant put it.... Similarly, competence in action can only be reliably developed in action, real or simulated; and the greater the reliance upon simulation, the greater the likelihood that some critical and unexpected factor at play in reality may render the preparation inadequate" (1976, pp. 2-3).

In conclusion, experience-based education also has an important relationship to the community college philosophy. Such a program offers the potential for a rejuvenation of the community dimension of the community college. Learning pertinent to student's educational objectives resulting from participation in the community's economic, social, and technological activity ought to be an essential community college educational form.

SPONSORED PROGRAMS

> *Thought disciplines action and gives it direction, while action corrects thinking and holds it to reality. Alternation of thought and action is not just a clever educational device; it is a fundamental of the educational process.*
>
> *Arthur Morgan (1958)*

Since this monograph is concerned with a very broad range of experiences, some definitions of categories are in order. Willingham neatly clarifies the major distinctions with which we will deal here.

> "Experiential learning....refers to two types of learning. One is called variously learning through life experience, prior learning, or nonsponsored learning. It includes any type of creditable learning--through work, travel, volunteer service--that a student may have acquired independent of an educational institution and, typically, prior to matriculation. A second broad category of experiential learning, generally called sponsored learning, is that incorporated in institutionally sponsored programs that are designed to give students more direct experience in integrating and applying knowledge--especially off-campus internships, service activities, work programs, and the like. In both instances, it is important to understand that the learning or competence that is acquired must be relevant to student and institutional objectives" (1976, p. 225).

Thus, sponsored learning is an all-encompassing term for a variety of activities having different names on different campuses. (Prior learning will be taken up in a later chapter.) With this definition in mind, let us look at some forms of sponsored learning and some barriers to its adoption.

Although sponsored experiential learning exists in many two-year colleges, in most cases it is only applied tactically in certain fields, usually occupational programs. The challenge of implementing it throughout the curriculum has seldom been met, for several reasons.

A great deal of misinformation and skepticism about sponsored experiential learning limits its potential impact. Its popular form, "cooperative education," is perceived by some as "compromising education." The work component of this work-study alternation is

seen at best as a kind of limbo which gives students a useful and financially rewarding diversion but which is intended primarily to sustain the really important task of education on campus. In some colleges, it is viewed more positively, yet even there it is considered an adjunct, a student service that contributes in important but ambiguous ways to student growth and maturity.

The record needs setting straight. Regardless of nomenclature, properly designed off-campus experiences offer the potential of stimulating learning of extremely high quality. It is learning that we are about, and sponsored experiential learning is an important alternative learning strategy, not a "things to do" student service or just a way of earning money.

A second reason for the limited application of experiential approaches is that some educators in this field have myopia--they see only one best way of providing this type of learning. And they insist that certain elements must be present if the outcomes are to be acceptable. But if we seriously believe that learning is our goal then we must admit there are many good ways and concede that the extrinsic aspects of the experience--whether it is a paid job, or provided in alternating terms, or supervised by a centrally organized staff, or tightly linked to assumed career objectives--do not determine its value as learning. Although these extrinsic elements deserve careful consideration, the intrinsics--those factors that bear specifically on the student's learning and its assessment--are more important. These include the mechanisms for identifying learning outcomes and the development of special projects, reports, and logs. Both these sets of factors are dealt with more completely in the following sections.

Preoccupation with Extrinsics

The fact that some sponsored experiential programs have overemphasized their formal aspects is due partly to the mind set that cooperative education, while valuable to students and employers, is at best a quasi-educational program. It is also due, understandably, to the sheer complexity of managing off-campus experiences. But

whatever the cause, this preoccupation has restricted and in some cases discouraged such learning alternatives. Let us now examine what I choose to call the extrinsic factors to see how they affect the potential contribution of experiential offerings.

Alternation Pattern. Although periods of study on campus can be integrated with off-campus learning in numerous ways, two alternatives and a third variation have received most recent attention. In the first system, a team of students fills one position, alternating full-time study on campus and full-time work off campus. The second popular method, called the parallel plan, is to have the student work in the afternoon and study on campus in the morning (or vice versa). A variation on the second option is the extended-day arrangement, whereby a full-time working person studies on campus part-time during nonworking hours, using his/her work experience (if judged appropriate) as a vehicle for learning--testing out principles, theory, and newly gained competence, interrelating on- and off-campus experiences, and accomplishing specific learning outcomes. Properly developed, such a system can be an important means for strengthening the learning process and avoiding the dichotomy between work and college endeavors that full-time workers often experience.

The alternation method chosen depends partly on the perceived administrative advantages of one system over another (see Heermann, 1973) and on the dictates of the funding source. The federal government, for example, in Title IV-D of the Higher Education Act, prescribed full-time alternation, although this position was eventually modified under Title VIII. Vocational education officials, who typically prefer the parallel plan, have also influenced their college's choices and in many cases have been inflexible in their attitudes, thus seriously impeding the adoption of programs with differing structures. Although there may be valid reasons for selecting one or the other method, ultimately we must recognize that student learning can and does result from experiences arranged in a variety of ways; uncritically assuming students are best served with experiences twenty

hours a week for six terms or forty hours a week for three terms is not educationally defensible.

Paid Positions. Certain educators believe that high-quality learning experiences result most often from paid positions. Others, such as proponents of the University Year for ACTION, hold that volunteer experiences can offer an important measure of learning for students, especially in the so-called human services fields. From my perspective, receiving payment is an extrinsic factor. To limit field assignments to paid positions is to limit the breadth and depth of challenging and intriguing assignments for students (see Woodridge, 1973). Like flexible alternation patterns, flexible student-reimbursement methods provide better service to both students and employers.

Numerous exciting and meaningful positions in social and public service, as well as in the arts and in communications, are unlikely to offer monetary rewards. But if the program is carefully designed and the agency establishes some means of holding the student accountable, an outstanding learning experience can result. Educators in the fields of health care, social work, and public service have long demonstrated the value of such an arrangement, and many students adapt quite amicably to such work experiences.

Occupational Education Stereotype. One of the tragedies of sponsored experiential learning has been its unfortunate identification with the occupational component of the community college curriculum. Certainly such experiences are very pertinent to students preparing for a career, but those who are undertaking general studies or are enrolled in university-parallel courses are too often deprived of learning experientially. In fact one can argue forcefully that those students not in occupational programs are most in need of exposure to and interaction with the wider community (see Biester, 1970; Dawson, 1972; and Dube, 1971). Personal enrichment and development, career exploration, and more effective interpersonal relationships are possible outcomes.

Sexton and Ungerer see experiential education as:

> "Nonstatic, sensitizing, utilitarian, and producing autonomy. It is designed to prepare students to confront a changing world with skills and attitudes fostered by a liberal arts education and honed in real endeavors, and [to provide] a firm sense of personal well-being. It is seen as contributing to attitudes that help the student relate to the human experience" (1975, pp. 10-11).

Thus, if experiential offerings are to flourish, they must be woven into the whole curricular tapestry and not be confined to career preparation.

Career Relatedness. Even in occupational programs "appropriate" field experiences are often too narrowly defined. Secretarial Science, Engineering Design, and Respiratory Therapy educators, to name but a few, frequently insist on a work assignment directly related to the career education, versus the general education, intents of the curriculum.

That important learning in terms of social awareness, interpersonal effectiveness, or career broadening can result from experience with a newspaper, a social agency, or a selling job seems to elude some. Two-year college educators should consider the breadth of competencies served by their programs of study, keeping in mind that experiential learning can be a powerful force in sensitizing persons to the psychological, sociological, and communicative dimensions of life. It makes a great deal of sense to provide a progression from general to specialized field experiences, while maintaining clear links between the field work and the general and occupational education elements of the program.

The primary criterion for field experience selection ought not be a fixed notion of career relatedness or, for that matter, a progression from general to specialized experience. It should be a concern for the student's needs. Programs of experiential learning offer unusual opportunities to individualize programs of study. Consider, for instance, the large numbers of "high-risk" students with low self-esteem, unrealistic conceptions of work, and only the most rudimentary notions of how punctuality, responsibility, and

accountability are related to job success. Field experiences requiring only very basic skills may have a significant effect on those students (see Dawson, 1971; McKinney, 1971; Lindenmeyer, 1967; and Smith, 1965). Unfortunately, however, some occupational educators perceive only the technical course sequence as essential to the student's education, ignoring other aspects of his/her development. This is as serious a problem in structuring experiential learning opportunities as it is in arranging on-campus experiences.

In conclusion, then, we must not let legitimate concerns about structure and career relatedness restrict the widest possible application of experiential learning.

What Really Matters

Student learning is the crux of our enterprise. To bring it about, experiential learning programs should have certain characteristics and components. These are described in the remainder of this chapter.

An Integral Role. Ideally, the two-year college and its community are closely linked, each benefiting the other in myriad ways. The community uses the college to educate its citizens, and the college, in turn, should use the community to fulfill its mission. This reciprocity is well illustrated by Arthur Cohen in the following passage from his classic Dateline '79.

> "The college's curriculum and instruction utilize many parts of the city; the community is used as a social laboratory. The core social science sequence employs students in jobs as data collectors, poll takers, field workers in a variety of public campaigns, and in similar capacities. Students do not remain on a campus to learn about society; they learn by participating in the community's activities, being involved in field projects, and attempting to manipulate small segments of the community in laboratory-type experiments. These experiences are not adjuncts to courses, they are forms of cooperative study that indicate the distinct conceptual break away from the campus as a closed community" (1969, pp. 6-7).

Obviously, sponsored experiential learning plays a strategic role in building close ties between the college and its environment and

therefore between students and their community. As I said in an earlier work, "cooperative education's contribution will be significantly limited should community college administrators see it 'tactically,' as just another interesting innovation which 'perhaps our college can find some application for somewhere in some program'" (Heermann, 1973, p. 15). Tactical application (e.g. in certain occupational programs) will greatly miss the contributions of experiential learning to the breadth of the community college student constituency. Opportunities for experiential learning are as crucial to the development of students as are opportunities for learning from classroom lectures--regardless of educational objectives.

An Academic Function. It is student learning not student activity which is the thrust of sponsored experiential learning. Because colleges differ in their organizational structures, educational leadership may not always be provided by the academic division, but giving responsibility for experiential learning programs to other divisions is risky. By being part of academic affairs, such programs have a better chance to become integrated in the whole curriculum. At the same time, however, we should resist the temptation to create a neat and tidy centralized department to deliver the experiential program. My position is that certain support services, such as job development, public relations, and student advising, are logically administered by a central staff office, along with career placement. But sponsored field work should have decentralized supervision by divisions and departments. (See Heermann, 1973, for a fuller presentation of organizational structures and decentralized supervision.)

Faculty Participation. Getting the faculty involved in off-campus as well as on-campus learning is tremendously important, because classroom teachers are most familiar with the educational objectives and academic and work capacities of students. Moreover, since they are closely attuned to the abilities which the student's program aims to develop, they are best able to guide students in

setting appropriate goals for field experiences. The faculty's involvement must be adequately compensated with overload pay or reduced class loads. All efforts should be directed to blurring the lines between managing classroom activities and supervising off-campus learning. I believe that participation in the experiential learning program should be voluntary, and the formula used to reimburse faculty members should permit them to oversee as few as one or two students so that they can proceed slowly and gain experience. A program which has a cross-section of faculty members, each of whom works with a half-dozen students, is superior to a program in which a single teacher handles fifty to seventy-five students.

Obtaining the cooperation of faculty members requires the most careful attention to change strategies (dealt with in Chapter 4) and cannot be done overnight. Yet this goal must be pursued vigorously, because a central staff coordinator only remotely familiar with the student's educational objectives cannot supervise his field experiences as well as a regular classroom teacher can. At the same time, however, the extent of faculty participation must be carefully defined. Job development and student placement, or the more mechanical phases of the program, should not be entirely their responsibility. Faculty members should be reassured that their primary role is to guide activities directly related to student learning. At the beginning of each term, the faculty member should be given a list of students to be supervised and their learning sites. The job development phase and all activities related to matching students to positions should be handled by a central staff that assists all departments and divisions (much like an audio-visual department). These staff members ought to have the closest possible working relationship with those responsible for after-graduation placement and vocational counseling.

Focus on Specific Learning Outcomes. Having so far considered only extrinsic factors, albeit significant ones, we come now to

the intrinsic elements--the objectives of field experiences. Each work assignment must have specific, measurable aims (see Heermann, 1973, pp. 123-147). These may involve occupational skills, personal enrichment, career exploration, a strengthened self-concept, interpersonal effectiveness or some other goals that are relevant to the broad development of the student.

The process of establishing these outcomes should be undertaken by the faculty, the student, and the "employer." The faculty member should suggest particular abilities that can be developed through the experiential assignment and that can be specified in writing. But the final product should incorporate the contributions of all three participants. The process itself is an important source of learning, as it requires introspection and a kind of interaction between teacher and student that is seldom present in the classroom. Since students are initially bewildered by the task, a student guidebook that describes how to set objectives is extremely helpful. The process is also an excellent vehicle for integrating a variety of subject matters and for achieving a personalized and self-directed learning program.

The learning outcomes act as a capsule job description and form the basis for evaluation at the end of the term. (A sample learning outcomes form is presented in Appendix A.)

Learning Exercises Beyond the Work Itself. There are a number of devices which allow the student to strengthen the learning experience. Several of the more important alternatives which may be used in conjunction with learning outcomes include:

- projects
- reports/themes
- narrative job descriptions
- critical incident reports
- logs
- seminar discussion groups

Reports, themes, and projects can be individualized to treat the concerns of the student, the employer, or the content of the student's program. These writing exercises provide opportunities

to relate field learning and classroom learning, to test classroom theory, or to develop projects or studies beneficial to the employing firm or agency.

A narrative job description allows the student to discuss the circumstances, nature, and responsibilities of the work position in an informal, first-person form. The duties of the job, the sources of job satisfaction and dissatisfaction, and the challenges, the sources of conflict are properly addressed in such a format.

A critical incident is an event involving human beings in which the purposes of the behavior is clear to the observer and the consequences are sufficiently definite so as to leave little doubt concerning its effect. The student makes inferences about the effectiveness or ineffectiveness of the behavior according to some standard (such as a principle or theory learned in the classroom). The critical incident is recorded on a simple form which describes the event, its repercussions, and a judgment as to the effectiveness of the act. This technique causes the student to be more discerning about the dynamics of the work setting as it relates to productivity. For example, one student described a work situation where the supervisor exhibited considerable sternness with a co-worker. The employee was humiliated resulting in considerable tension in the office and diminished morale. The supervisor managerial approach was judged ineffective by the student.

A log, the most personal form of written learning exercise, is a continuous, free-form commentary on the learning experience. Ideally, it reveals the student's insights into those unique results that were not specified among the learning outcomes. Like a diary, the log requires regular reflection by the student throughout the experience.

Another extremely valuable approach is a seminar or group discussion which brings together students during their experiential term to discuss what they have done--learning that has resulted from the experience, for example--and to share experiences. These

gatherings often produce a support group and a sense of community, because this medium stimulates new insight as well as new learning about the importance of community.

Curricular Status. Because experiential learning is a valid component of the curriculum, it must (1) be given degree credit and (2) be shown in the catalog and in curriculum guides as an integral part of each program of studies. These two requirements must be fulfilled if substantial numbers of students are to have the opportunity to participate in a program of sponsored experiential learning. Ideally, the catalog should read: "The student may earn cooperative education or experiential learning credits or take on-campus courses to fulfill a particular requirement." Presenting it in this way establishes the importance of the offering yet provides an escape hatch should a student benefit more directly from on-campus study or should there be no appropriate experience available.

A Postscript: Where to See It in Action

Golden West College (California), Orange Coast College (California), Sinclair Community College (Ohio), and San Mateo Community College (California) currently provide extensive sponsored experiential learning offerings which include many of the elements suggested in these pages. Pasadena (California), Broward (Florida), and La Guardia (New York) community colleges also offer excellent programs.

> *The student who secures his coveted leisure and retirement by systematically shirking any labor necessary to man obtains but an ignoble and unprofitable leisure, defrauding himself of the experience which alone can make leisure fruitful. "But," says one, "you do not mean that the students should go to work with their hands instead of their heads?" I do not mean that exactly, but I mean something which he might think a good deal like that; I mean that they should not...study it merely, while the community supports them at this expensive game, but earnestly live it from beginning to end. How could youths better learn to live than by at once trying the experiment of living?*
>
> ***Henry David Thoreau, (1854)***

RECOGNIZING PRIOR EXPERIENTIAL LEARNING

> *Learning is more individual than we have thought, more varied in its expression and occasion, more evenly spaced along a person's life. An hour's reflection will reveal that each of us learned the most useful, loveliest things he knows outside school. Life, libraries, and labor are potent teachers that leave school and college far behind.*
>
> *Ronald Gross (1973)*

Our older, adult students deserve better. The U.S. Department of Labor (1973) indicates that the age group 25 to 44 will experience the fastest rate of growth nationally during the 1970s (a 30% increase from 1970 to 1980 versus a 2% increase 1960 to 1970). Their increasing numbers and the important learning they bring to the campus should make us pay more attention to their needs and contributions. What they have learned is often due not to traditional schooling but rather to work experience, family management, travel, volunteer work, industrial and public-sector training programs, and self-initiated study and reading. That we have not taken more definitive action to assess and recognize this learning suggests something of our preoccupation with younger students and with teaching (as opposed to learning). Perhaps the single greatest hindrance has been the paucity of means to translate learning from nontraditional sources into traditional credit-hour equivalents.

Yet the need to make this translation is greater than ever, because the two-year college's ultimate recognition of achievement--the associate degree--is as important to our adult student's career advancement, upgrading, and enrichment as it is to our younger student's career preparation or university transfer. The rite or ceremony necessary to attain this degree presently involves extensive classroom sitting, exam taking, and credit accumulating. And not all of our community members are inclined to channel themselves in this way or financially able to afford this luxury. It is time we dropped our rather elitist notion that one becomes educated

only by obeying and adapting to classroom protocol. Because of the community college's populist mission, we have a particular obligation to devise systems for validating prior learning and to grant credit for what our adult students already know.

The practice of assessing and granting credit for prior experiential learning deserves to be an integral part of college processes. The danger is that the practice will be branded "nontraditional" (translation: impractical, risky, of questionable academic integrity) and therefore that only those students enrolled in experimental or nontraditional degree programs should be allowed to take advantage of the offering.

The quality of the leaders who initiate and support efforts to recognize prior learning will clearly influence the adoption of these practices. The top administrators must be committed to, or at least supportive of, the project. And administrative councils or cabinets, advisory committees, student government representatives, and faculty committees and organizations should be systematically involved in considering whether to recognize prior learning. Once campus leaders accept recognition in principle, the development of assessment mechanisms can follow.

Crediting

For the overwhelming majority of community colleges, credit hours are a kind of "currency" that symbolizes verified learning. An associate degree is granted when the student has accumulated some quantity of this currency in certain qualitative domains. The artificiality of this system is well articulated by Harold Taylor:

> "I had no idea what academic credits were, except that three of them were awarded for spending fifteen weeks, three times a week, with one separate discussion session each week, in my classes in philosophy. After suitable enquiries I learned that academic credits had originally been invented to handle the problem of fitting the student into the proper level of study in a college to which he might transfer, and that other than this bookkeeping

function, on the basis of which a degree could eventually be granted, academic credits had no educational use.

> "Nor was there any inclination among my informants--registrars, admissions officers, or faculty members--to face the fact that possession of a small hoard of academic credits did not mean that the student who had stored them away was actually in possession of knowledge in the field in which the credits were awarded. It was an entire system in which grades, tests, averages, and units of credit all went together" (1975, p. ix).

Taylor's point is well-taken, yet we cannot ignore the fact that this currency still has symbolic as well as actual economic value in our society. If it did not, no one would be interested in certifying any kind of experiential learning. So let us examine how prior learning can be converted into "green stamps," so to speak, toward degree requirements.

The first and most important task is to determine what standards will be used to measure experiential learning and accordingly what kind of credit will be given. One standard is simply the amount of time that has been spent acquiring the knowledge. Peter Meyer describes how time might become credits:

> "In some programs the number of years employed becomes the number of credits to be awarded. Thus, a person who has worked successfully for three years as an accountant and has a letter from an employer verifying this automatically receives 12 semester hours of accounting (4 semester hours for every year worked). Whether this experience will be considered as beginning, intermediate, or advanced depends on the third-party evaluation and the description of duties. Obviously, every program puts a limit on the number of credits to be achieved in this manner" (1975, p. 171).

Although such a method is simple to administer, its educational validity is questionable. The problem is that a person may simply have repeated a year's work ten times, let us say. Obviously, in this system, credits have no necessary relationship to learning. For this reason, time is not a recommended yardstick.

Another measure is demonstrated ability. The performance standards established by a competence-based program can act as the basis of

the assessment, and to the degree that the student can document his/her competence, credit is awarded. Even in other types of programs, the standard of the assessment may be the same--what can the student do as a result of the experience?.

A more favored practice is to consider previous learning equivalent to one or more courses. Thus, students are asked to think of their acquired knowledge in terms of the curriculum in their field. In one college I am familiar with, students are provided with careful descriptions of all course offerings and are asked to reflect on the relationship of what they know to the scope of the course.

The credit that is granted according to these various standards also takes various forms. The following are the most favored:

- direct course credit,
- block credit,
- experiential learning or cooperative education credit, and
- recognition of competence.

To the extent that the learning is equivalent to existing courses, direct course credit should be awarded. Block credit, or credit which uses the existing course taxonomy but does not specify course numbers or sequences, may be given when the prior learning has a significant and demonstrable relationship to the curriculum of a particular program but not to specific courses. Those colleges already giving credit for sponsored experiential learning can use the same credit mechanism to recognize prior experiential learning. This type of credit is handled much like block credit and ideally should be used in conjunction with direct course credit. Programs that reward achievement with statements of competence instead of academic credit may recognize prior learning in the same way. Colleges using a narrative transcript simply describe the ability or skill and the circumstances of the learning, whether prior or sponsored. Certainly these latter procedures offer important advantages over traditional credit practices, but the extra demands they make on faculty and administrative support must be considered. (For an excellent discussion of transcripts,

including narrative forms, consult Forrest, Knapp, and Pendergrass, 1976, pp. 171-188.)

Assessors

Those persons charged with evaluation should clearly perceive the standards to be followed. Presumably, these persons are regular faculty members who understand the discipline or occupation in which the student is documenting learning (see Whitaker, 1976, pp. 189-223). And ideally they have had some inservice training which promoted positive attitudes toward experiential learning and gave them information on "how-to-do" assessment.

Some colleges involve individual faculty members with the assessment responsibility. Under this system, students confer with teachers of particular courses to ascertain whether their previous knowledge is creditable. But compared to committee assessments, single-person evaluations have distinct disadvantages. For one thing, teachers acting individually are more likely to err.

> "There seems to be a growing feeling that there is not only safety in numbers but also greater reliability. Therefore, committee assessment is coming into much greater use than the one-for-one examining technique. Programs which began by assigning the evaluation task to one faculty member are moving toward the committee, some because of the charge of "horse-trading," others because the particular prior learning events lend themselves more easily to a committee evaluation.
>
> "More than one reviewer should participate in translating a student narrative into academic credit, especially if it contains content from more than one discipline.... Consensus among members of the same discipline is the desirable outcome. While many argue that the committee practice is cumbersome and costly, it is vital if the crediting process is to gain the respectability it deserves. Again, these decisions are among the first that need to be made if the process is to succeed" (Meyer, 1975, pp. 168-169).

Meyer also recommends that the committee include not only faculty members but also a consultant or community person(s) and a student(s) who have gone through the process. "The committee must be large enough to represent the various kinds of knowledge and

competences presented by the student and yet small enough to be able to make effective decisions" (1975, p. 170).

In addition, some provision should be made for an appeal to a different committee. Existing college committees on educational policy or academic affairs may logically be used for this purpose.

Modes of Assessment

What means of evaluation are currently available? The traditional proficiency exam and CLEP (see Appendix B) provide two valuable avenues. Prior learning involving psychomotor skills (such as typing and keypunching) or information-handling skills (those required of a legal aide or a rate-and-tariff specialist, for example) may be effectively assessed by paper-and-pencil or performance tests. (For assessment guidelines see Knapp, 1977; Knapp and Sharon, 1975; and Forrest, 1977.) Some less familiar methods include:

- self-assessment rating devices
- simulations (such as case analysis, role-playing, gaming, and stress interviews)
- essays and other types of written composition
- panel interviews
- on-site visitations
- product assessments (compositions, paintings, industrial plan documents, films, sculpture, accounting journals and ledgers, architectural drawings, and the like)
- student-prepared portfolios

The last of these is one of the most promising new techniques, particularly as a means of demonstrating learning that is difficult to measure with standard tests, such as interpersonal skills. (See Breen, Donlon, and Whitaker, 1977a.)

The Student-Prepared Portfolio. A portfolio is not merely an in-depth resume or vita. It is a vehicle for organizing and clarifying experiential learning. It is the product of a process that translates various kinds of nonclassroom learning into competence, documents them, and is ultimately assessed for degree credit. The process is based on the following premises:

(1) to a significant degree, competence in many occupations is interpersonal;

(2) existing paper-and-pencil tests inadequately measure the extent of interpersonal effectiveness;

(3) older adult students possessing important abilities are generally intimidated by higher education and specifically by paper-and-pencil testing of their competence;

(4) formal education costs adults considerably more than it does younger students supported by their families or by external financial-aid agencies;

(5) adult students are eager learners anxious to build on previous learning (and extremely rewarded and fulfilled by the process of gaining recognition for that learning); and

(6) these students appreciate the importance of integrating prior learning and college-sponsored learning through a systematic program designed to achieve enrichment or occupational goals.

Portfolio preparation is an unfamiliar, laborious, yet rewarding business. Education itself takes on an entirely different scope for many students as they begin to examine their lives as a continuum of learning stimuli; classroom sitting and exam taking on a college campus are then seen in perspective, as only steps in a systematic progression. Probably the most difficult part of the whole procedure is differentiating between what they have done and what they have learned from doing (and then figuring out how to express that in writing). They cannot forget that prior learning and not prior experience determines the award of credit. The introspection and effort required to develop the portfolio make this process itself an important source of learning, and for this reason it should be given credit independent of its product.

A credit workshop, seminar, course, or independent study structure is highly recommended. Such an approach is entirely cost effective, and it significantly improves the quality of the portfolio (Meyer, 1975). William Rainey Harper College and Sinclair Community College conduct excellent portfolio development group sessions. Whether the offering is called a course, a workshop, or a seminar,

a laboratory approach should be used, allowing individualized attention and a sharing of experiences and problems. This sharing and the group support that results are important outcomes of such a course, and therefore the instructor should encourage a great deal of personal exchange as well as disseminate information. The product of the portfolio development class is more than the portfolio. The course has powerful affective implications in terms of student self-esteem, assertiveness, conception of learning, career and educational expectations, and value clarification.

Steps in the Process. Operating procedure varies from college to college, but portfolio development usually goes something like this:

(1) Upon admission to the college, or before admission, the student learns of the college's intention to credit non-classroom learning as presented in a portfolio.

(2) After admission the student contacts the appropriate office to get information and guidelines on portfolio development.

(3) The student completes the necessary forms and applications, indicating briefly the circumstances associated with the previous learning.

(4) The student enrolls in a portfolio preparation class or makes an independent study arrangement.

(5) The student clarifies his/her educational objectives in relation to previous growth experiences and develops a short chronological record of experiences.

(6) With the assistance of a mentor, faculty member, or counselor, the student specifies, in writing, the college-level learning he or she has acquired from nonclassroom sources (ideally this takes place in a group setting where other adult students can assist and provide support in revealing learning).

(7) The student verifies or documents the learning (through third-party validation letters, products of his/her work, awards, certificates, and so on).

(8) The student completes the actual portfolio, which includes a statement of educational objectives, a chronological record, a clarification of all experiences and the learning they produced, and supporting documentation. The portfolio shows how the learning that is cited is related to particular

courses or abilities. A request for credit hours commensurate with the learning, as determined by the student, is often a component too.

(9) The portfolio is assessed by a committee which may include, in addition to faculty members, student peers and community persons; portions of the portfolio may be evaluated by individual teachers acting alone.

(10) The student is awarded credit for the new "certified" learning.

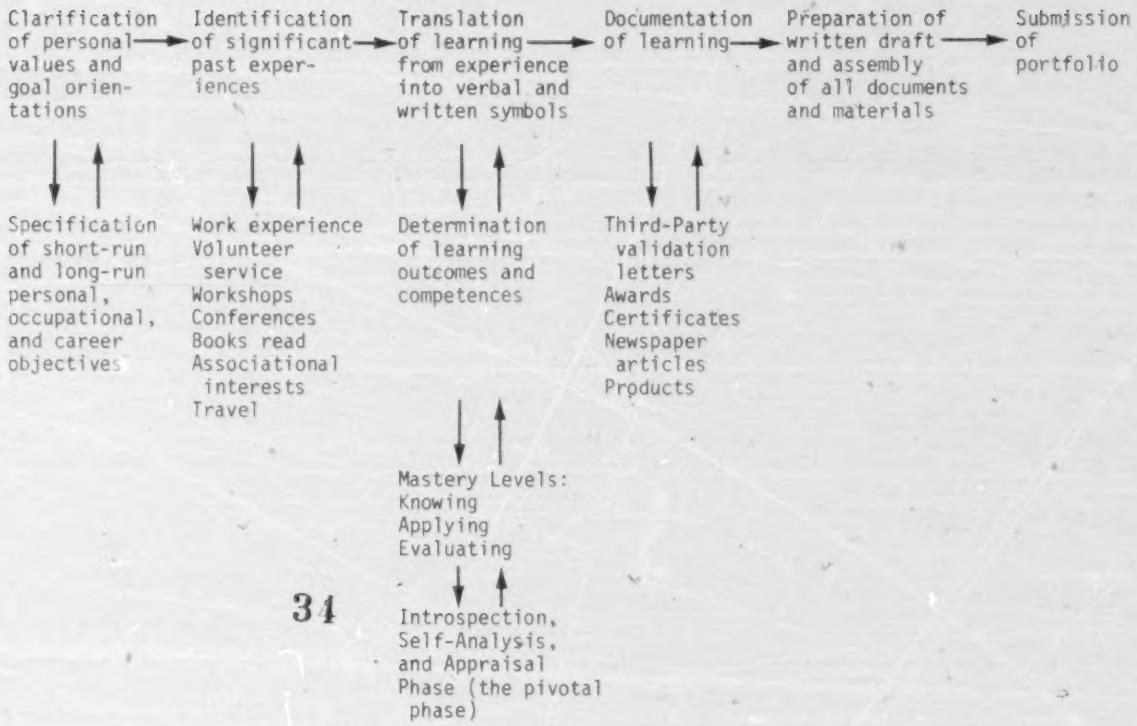
Table 1 suggests the flow of events in the process.

The student must see clearly that it is prior learning and not prior experience that determines the award of credit. It requires considerable introspection and effort.

It is useful for the student to begin by making a list of all experiences from high school graduation to the present date (called the chronological record). This record will become a part of the portfolio. Each experience should then be elaborated on in the narrative. If it was a job, the job title, the place and length of employment, and a job description should be written. Finally the learning from that experience should be specified as clearly as possible. The student should limit his/her self to the identification of learning which is felt to be college-equivalent or college-certifiable. Those experiences that did not lead to learning, are not documentable, or are unrelated to the degree program should not be amplified in that portion of the portfolio which specifies learning. Learning that does satisfy the criteria should be stated clearly and concisely. As Willingham puts it,

> "Learning outcomes should be identified with enough specificity that they can be readily communicated. Broad learning skills like communication, analysis, or management are frequently useful in classifying learning outcomes but are not especially helpful in making clear what learning was accomplished. To say that a person has learned to communicate may mean many different things at different levels of competence. More specific description of learning is necessary if faculty and student are to know clearly what is to be learned and to recognize when learning has in fact taken place. Useful descriptions

TABLE 1
PHASES OF PORTFOLIO DEVELOPMENT



> of learning should make obvious what the student is able to do or how deeply her or his knowledge extends" (1976, pp. 238-239).

As shown in Step 7, verification (an essential component) can take several forms. If the third-party validation letter is used, the student and the writer must recognize that the letter is to document prior learning, not to act as a letter of recommendation. The letter should answer the who, what, why, where, when, and how questions about the learning outcome in much the same way as the student does in writing the portfolio. (For fuller descriptions of all the variables of portfolio development, see Meyer, 1975; Trivett, 1975; and Knapp and Sharon, 1975.)

Portfolio Design. The arrangement of materials in the portfolio closely parallels the steps outlined above. Ideally, the college should establish a standard format. The form adopted by Sinclair Community College, which is described below, is only one possibility.

I. Educational intent: The first few pages of the portfolio should briefly describe the student's broad experience and personal, career, and educational objectives. It should specify where the student has been and where he/she is going--in the short run and the long run. Most important, it should be a very honest portrayal of the student's hopes and aspirations, as well as anxieties. Uncertainty about goals should similarly be revealed. This thumbnail sketch should be done very concisely in a few pages.

II. Chronological record: This sequence, mentioned earlier, should present the highlights in a sentence for each year, without analysis or commentary. The chronological record along with the statement of educational interests provides the assessment committee with useful background regarding the student.

III. Specification of experiential learning: The heart of the portfolio should be arranged according to the settings of the experiences--at home, at work, while traveling, at conferences, and so on--according to areas of competence or course equivalents. The headings on an 8 1/2" x 11" page should be the following:

WORK/LIFE EXPERIENCE	EXPERIENTIAL LEARNING	APPENDIX REFERENCE FOR DOCUMENTATION

In the first column the student indicates (assuming that a work experience is being described) his/her job title, the place of employment, the period of service, and the average number of hours worked, and gives a brief job description. The second column, which should occupy approximately two-thirds of the page, is that space where the student specifies learning attributable to that experience in as clear and concise a form as possible. In the third column the student refers the assessors to a particular appendix section where documentation (such as third-party validation letters and products of work) is provided. The final section of the portfolio includes all relevant materials which verify learning.

Student Centeredness and Support. What constitutes learning from experience, and the process of assessing it, is not easily understood. So it is very important that community colleges provide empathic staff members, as well as helpful materials. The components ought to include a brochure which clarifies the college's intention to recognize learning in nonclassroom settings; a series of student advising and counseling sessions, progressing from an initial exploratory group session to an individual session; a carefully developed student guidebook; and, as previously suggested, a portfolio development class. All of these offer the opportunity to reinforce or build self-esteem while assisting the student to get in touch with his/her self and with the important growth, maturity, and learning that the person has achieved already.

Although writing a guidebook is time-consuming, and one study (reported by Joan Knapp, 1975) revealed that many colleges are

reluctant to provide such an aid, it nevertheless ought to have a high priority. The document Assessing Prior Learning--A CAEL Student Guide (Forrest, 1977) may be used for such a purpose, but the distinctive characteristics of particular colleges ought to lead them to develop guides tailormade for their own program.

The student guide should deal with the following variables:

(1) the philosophy and rationale of prior experiential learning assessment.

(2) assessment possibilities other than the portfolio (such as CLEP).

(3) the variety of circumstances from which learning might emanate (volunteer service, conference attendance, and so on).

(4) the way prior learning may ultimately be recognized (with block credit, internship credit, or course credit, for instance).

(5) the relationship to and support provided by a faculty member or counselor during the preparation phase.

(6) the role of the portfolio development course as it relates to the process and to heightened self-esteem.

(7) the tuition or fees charged for the preparation and assessment phases.

(8) the makeup and procedures of the assessment committee.

(9) the criteria for evaluating the integrity of prior learning (such as course equivalence or competence).

(10) the introspection and self-analysis involved in developing the portfolio.

(11) the organization of the portfolio (including the statement of educational interests, chronological record, and learning outcomes).

(12) the expectations and format for each portion of the portfolio.

(13) the college's position on awarding credit for prior learning, not just for years of prior experience.

(14) the role of documentation and a description of acceptable documentation.

(15) how to go about securing third-party validation letters and what form they should take.

(16) any particular constraints that the student should be alerted to (such as a deadline or the need to write clearly

and concisely).

As the college begins to plan an individualized assessment procedure, it must decide how its human resources will be used to help students. In addition to initial counseling and advising regarding assessment opportunities, the college ought to support and assist students in developing their portfolios (Meyer, 1975, p. 171, recommends that counselors take part in this phase, as well as evaluate the final product).

I have found that some colleges provide little or no attention to the development phase, assuming the student can find out how to build his/her portfolio without formal assignment to a staff person or enrollment in a portfolio development course. Other colleges connect faculty and student but do not reward the instructor. Similarly, some colleges expect faculty members to undertake assessment without remuneration. Of course, many demands are made on any college's funds, but if the school is serious about experiential learning, it will put money "up front" to underwrite assistance to students and to reward staff participation.

One mechanism for reimbursing faculty for assessment has been developed by Delaware County Community College. Under this unique system, the student enrolls for a single credit, up to some multiple of credits, related to the number of courses to be assessed. Because it is tied to the credit system, this credit fee "triggers" state subsidy and local contributions, thus allowing faculty participants to be paid (see Kray and Hultgren, 1976). For example, a student who is to be assessed in three course areas would enroll for three credits; at Sinclair Community College a variable credit course called "Assessment of Experiential Learning" provides the vehicle. Students think of payment for the credits not as tuition but as an assessment or consultant fee.

In conclusion, the college should listen carefully to its adult students. They are clearly expressing a need for a pragmatic and meaningful education related to their educational objectives

and an equally clear disdain for marking time in courses from which little new can be learned. The time for recognizing the prior experiential learning of these citizens has come.

A Postscript: Where to See It in Action

The three colleges cited in this paper, Delaware County Community College (Pennsylvania), Sinclair Community College (Ohio), and William Rainey Harper College (Illinois), offer exemplary prior learning assessment programs. The Community College of Vermont has also been a pioneer among two-year colleges.

A person is not educated until he has learned by practice to turn words and ideas into action.

Arthur Morgan (1934)

CHANGE STRATEGIES

> *If a person is to grow up, he needs, in the first place, access to things, places, processes, events, and records. To guarantee such access is primarily a matter of unlocking the privileged storerooms to which they are presently consigned.*
>
> *Ivan Illich (1973)*

Acceptance of the notion that learning may take place in locations other than college campuses is one thing and providing opportunities for experiential learning is quite another. Bringing about a change of this kind in education can be exceedingly difficult. As experiential educator Samuel Baskin points out, the barriers to change include:

> "Habits and tradition (we teach the way we have been taught); the threat of change and the security of doing what one has done before (why change a good thing?); vested interests (we had better protect our own domain); bureaucracy (what better way to stifle creativity than to send the idea through channels?); the history of education itself (education "happens" when a student comes to a classroom, takes a seat, and looks up at the teacher); financial problems (contrast if you will industry's investment in research and development with higher education's allocations for programs or offices of this sort); the reward system (what "gain" for the teacher who challenges the system?); lack of time (contrary to their public image, most professors are so busy doing what they are doing that they have little time to ask whether they might proceed differently); inertia; and a host of other factors which lead us--sometimes consciously, sometimes unconsciously--to want to (or think we must) preserve what we have" (1967, p. 1).

Thus, successful programs are not just the result of careful planning, systems design, and boundless energy and enthusiasm. They occur because at least some of these barriers have been overcome. Specifically, change hinges on the knowledge, skills, and attitudes of the faculty, counselors, administrators, and other participants in the program. Without their support, one cannot implement a program of experiential education; and winning their allegiance usually requires a deliberate change strategy.

Kurt Lewin's work (1935) is especially pertinent to this

subject. According to his "field theory" of change in social settings, an equilibrium normally exists between the driving forces and the restraining forces in the force field. Change is the result of modifying or changing the restraining forces or adding to the driving forces. The former is preferred, because adding to the driving forces may only intensify the restraining forces (which are often negative attitudes). Increasing the resistance leads to a "spinning of wheels" without forward movement.

Before the restraining forces can be modified, they must obviously be identified. In the college, these forces usually emanate from the following:

- college policy
- tradition
- fear
- lack of resources
- the change agent

Typically, fear of change and its consequent disequilibrium are at the crux of the resistance. Resentment, too, may develop in those who are not involved in designing and directing the alteration. The change agent, although not a restraining force in him/her self, may unintentionally cause resistance in others, who may interpret his or her best intentions and loftiest aims as fanaticism. Or perhaps the agent's personality or interpersonal style is not congruent with many campus constituents.

Local circumstances will suggest the crucial restraints and dictate the action necessary. At one college I know, the following were serious restraining forces:

- conventional views about the location and circumstances in which learning occurs
- a faculty reward system based on contact hours of classroom instruction
- fee payment arrangement linked to credit-hour enrollment
- credit-hour awards based upon classroom ritual
- preoccupation with informational (rather than interpersonal) skills

Attitudes regarding how and where people learn was a significant barrier. Only after this restraining force was modulated, especially at administrative levels, was it possible to deal with "nitty-gritty" issues. Changing faculty attitudes about the circumstances of learning was initiated simultaneously with the presentation of a formula for reimbursing faculty. The handling of this situation illustrates how one should analyze and tackle first the primary resistance. Once that is reduced, the secondary forces can be modified more easily.

Some useful change tatics include

- third-party consultation
- change teams
- affiliations with professional associations
- visits to exemplary colleges
- advisory committee involvement
- inservice programs (biased toward attitude change)

There are available numerous experts in experiential learning design and development who are also skillful as change strategists. Since they necessarily have been adept at bringing about acceptance of experiential learning in their college, their consultation can be extremely valuable. They can suggest sources of funding for at least the initial planning phase (lack of money for start-up activities is a significant restraining force at many colleges) and help in all the other phases as well.

Change teams, another effective mode, should include a range of persons representing both driving and restraining forces and all constituent groups. How the team is created depends on local circumstances. Although the team, however formed, typically recommends a course of action to a designated administrator, Sikes, Schlesinger, and Seashore (1973) recommend that the team actually devise and carry out steps to produce desired change. They describe the interpersonal dynamics of the group as "open, nonhierarchical, nonauthoritarian." Using a consultant in conjunction with the change team can sometimes increase the potency of this change tactic.

Professional associations can also contribute much to the academic integrity of experiential programs, especially by helping the participants develop the requisite knowledge and skills. Colleges in the process of augmenting sponsored experiential learning should investigate the Cooperative Education Association and the Society for Field Experience Education. Colleges offering both sponsored and prior experiential learning options will be interested in the Council for the Advancement of Experiential Learning. CAEL has published numerous useful working papers and reports which provide excellent how-to-do-it information.

CAEL was initially a project undertaken jointly by the Educational Testing Service and a select group of colleges and universities funded by the Carnegie and Ford Foundations. Today it is an autonomous incorporated association of colleges and universities with its own board and mission: "to help institutions of higher education increase their ability to define, assess, credit, sponsor, and evaluate experiential learning and experiential learning programs" (CAEL, Project Status Report, 1976, p. 7). CAEL provides a vehicle for discussion among the more than two hundred member institutions and a systematic review and tryout of model approaches and materials. So far the organization has focused on interpersonal competence and its assessment, the use of portfolios in judging nonsponsored learning, the evaluation of sponsored experiential learning, the use of expert judgment in assessing learning outcomes, and faculty development. Many of its useful publications are listed in the Bibliography.

Still another valuable change tactic is to encourage visits to colleges providing exemplary experiential programs. This is a superb way to "whet the appetite" and to find out how such programs are operated. These trips are useful both for those skeptical about the educational merit of experiential learning and for those who are helping to design and develop new experiential programs.

Existing program advisory committees ought to be involved from

the outset in considering how to structure sponsored experiential learning and prior experiential learning assessment. Such an educational re-orientation is typically applauded by seasoned practitioners who appreciate that competence is very much a function of experience. Program directors and faculty members should also be encouraged to participate in discussions with the advisory groups in order to focus on and develop an understanding of the learning potential of nonclassroom experiences. The format of committee meetings should be carefully conceived and should include a thoughtful presentation of the rationale for experiential learning. The aim, obviously, is to inculcate positive attitudes toward off-campus learning.

Inservice programs for the faculty and administration are likewise essential. Like the advisory committee, they should deal first with attitudes. Once the participants are committed to the principle of experiential learning they can begin to acquire the additional knowledge and skills they need through other inservice workshops. Community college educators in all formal organizations--including academic councils, faculty organizations, student government, and administrator cabinets--should be included.

Organizational and Administrative Considerations

There is no neat and clean formula for putting this all together. However, the adoption and implementation of experiential learning programs throughout the college hinge on decisions about structure. How might the college mobilize its resources in order to provide experiential learning opportunities to many students? What overall structural changes should be made? Who should lead such a program? How might human resources be brought together to elicit the widest possible support system for experiential learning? Who should monitor experiential learning?

Sponsored experiential learning or cooperative education is usually coordinated and supervised by a central department (Wilson, 1972). And the assessment of prior experiential learning is frequently

the responsibility of the administrator of the college's nontraditional program. However, as I mentioned in earlier chapters, this split is undesirable. If experiential learning is to take its proper place as an integral part of the curriculum, then a single administrator or office reporting directly to the chief academic officer should oversee both types of programs. This person or this staff nevertheless should not actually "deliver" or assess the learning (these tasks belong to the faculty members in the various divisions and departments) but should provide coordination and support in the form of job development, public relations, paper work, portfolio development course instruction, inservice training, and student counseling. And in the early phases this office should provide advocacy and design efforts.

Unfortunately, such a unified, holistic approach is seldom taken. Although organizational structure is important, if a competent administration is not provided for experiential learning, it may at best be only a noble idea with a meager impact. Commitment to this concept by the top administrators and, ideally, the trustees is essential. Without their support, a change strategy designed for middle-level administrators and faculty members could be profitless. And obviously their backing must be secured if the program is to receive any college money.

The person who leads the enterprise should be carefully chosen. A highly respected and visible faculty person or a division chairperson currently on the staff is best. This person certainly needs to be acquainted with the concept, and developing his/her knowledge and competence may be a first step in the change strategy. Should such an internal candidate not be available, the administration should appoint one who is well versed in experiential or nontraditional education. He or she should be sensitive to the values of the traditional faculty and should be adept at human relations and change processes. Great pains should be taken to ensure that this person and the total effort are not seen as something out of the

mainstream of the educational delivery system.

The appointee should be assigned to educational policy and administrative cabinets or councils. At their meetings, experiential learning should be a regular and featured agenda item. This new administrator needs to be very visible during the early phases, which focus on resolving conflicts and changing attitudes, as well as during the later phases of knowledge and skill development and ultimately implementation.

Programming experiential learning is exceedingly complex. The complexity is a function of the quantity and unusual character of the variables involved. It is useful to incorporate these elements in a series of planning steps, as follows:

A. Present the rationale for experiential learning (prior and sponsored), identifying its benefits to the students, college, and community.

B. Develop a change strategy, focusing on attitudes, which will stimulate acceptance of experiential learning; decide who needs to be "changed" and design specific tactics to reach them.

C. Write a comprehensive proposal for launching an overall experiential learning program; specify all the purposes of the effort.

D. Develop a budget that indicates the potential income from tuition (from enrollment in credit-bearing assessment classes) or from assessment fees and the probable expenses of assessing prior learning and of supervising field experiences; be careful to tie the entire process into the credit system so that it may be eligible for state subsidy and/or local support.

E. Achieve institutional agreement upon an administrative and organizational structure with clear-cut authority patterns.

F. Establish the authority relationships (line and staff) between the experiential learning department or office and all other organizational components.

G. Specify and design the components of the sponsored experiential learning package (such as the learning outcome form, logs, reports) and the assessment mechanisms (such as CLEP, portfolio) for prior experiential learning.

H. Prepare student guidebooks for both sponsored and prior experiential learning.

I. Prepare operation manuals for participating faculty members and counselors.

J. Develop a paper work and communications system for the experiential learning program.

K. Determine credit practices (such as block, direct course, or experiential learning credit).

L. Modify all existing curricula to include experiential learning and make the necessary catalog revisions.

M. Establish a staffing plan that shows how faculty members' time will be divided between regular class work and supervision of the program.

N. Devise an inservice program for developing or increasing the knowledge and skill of the staff.

O. Create public relations materials--brochures, audiovisual presentations, mailing pieces, and the like--directed to students and potential field-site supervisors.

P. Start developing field experiences in the community.

Q. Establish a counseling and orientation program for introducing students to experiential learning.

R. Develop and implement a program of instruction (including, perhaps, formal courses, self-study materials, audiovisual aids) for students involved in assessing what they already know (how to assemble and document the portfolio) or in field experiences (how to write learning outcomes, prepare a report).

S. Provide an information clearinghouse for field experiences in the community; develop mechanisms for placing the student; and set up a communication system among the employer, the student, and the faculty person.

T. Talk to administrators of neighboring transfer institutions regarding articulation and try to agree on credit policies for learning from off-campus experience.

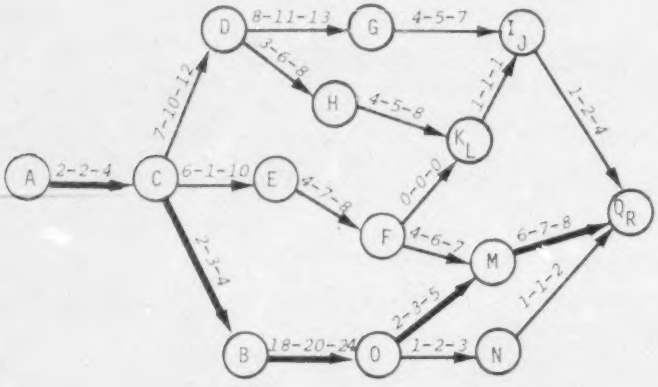
U. Undertake a program of professional development for all those involved with experiential learning; encourage active participation in the professional growth activities of the CAEL organization, the Cooperative Education Association, and the Society for Field Experience Education.

V. Develop a system for measuring the outcomes of the experiential learning program.

Because of the complexity and number of these variables, such an undertaking requires a logical and systematic planning mechanism. PERT, Program Evaluation and Review Technique, provides such a planning tool. PERT was developed by the U.S. Navy in the development of the Polaris Ballistic Missile Project. It is a planning and controlling technique that arranges subsystems within established time criteria. An analytical device that visually presents the work associated with any particular project, PERT is adaptable to projects with as few as 25 phases and as many as 20,000. The former can be handled manually, while the latter obviously requires computerization. The following page is an experiential learning PERT which is manually manipulated.

Basically, PERT portrays a system or network of subsystems, consisting of a series of events and activities. An activity is represented by an arrow, and an event by a circle. Activities represent work to be accomplished, and events indicate an instant in time signifying the completion of an activity and the beginning of a new activity. In Figure 2 the letter symbols correspond to the planning variables discussed previously for a hypothetical community college.

FIGURE 2
AN EXPERIENTIAL LEARNING PERT NETWORK



The numerical values represent three units of time--the most optimistic, most likely, and most pessimistic completion time. The network pattern which consumes the most time is particularly crucial because this path, called the "critical path," controls the completion of the entire project. The darkened lines above indicate the critical paths. Further study and analysis may allow a trade-off of activities so that the total project can be completed by some agreed-upon deadline.

PERT is particularly valuable in conceptualizing the full scope of the work to be done. It focuses attention on potential bottlenecks and causes the planner to consider time as well as process factors. It is a kind of timing and action calendar which is useful in ascertaining to what degree the project is on schedule. In conclusion, PERT or a similar systematic planning exercise is extremely useful in conducting a program of experiential learning.

> *It is one of the major paradoxes of our times that institutions of higher learning, which should be preparing our young men and women to enter a world of social and intellectual revolution, are themselves so resistant to change.*
>
> *Samuel Baskin (1967)*

THE COLLEGE WITHOUT WALLS

> *I believe that only actual participation constitutes socially valuable learning, a participation by the learner in every stage of the learning process, including not only a free choice of what is to be learned and how it is to be learned but also a free determination by each learner of his own reason for living and learning--the part that his knowledge is to play in his life.*
>
> *Ivan Illich (1973)*

The term "College Without Walls" is used to designate an associate degree program. The better known name, the University Without Walls, is reserved for baccalaureate and graduate programs. As its name implies, the College Without Walls is not composed of bricks and mortar or glass and steel. It is not just a program that allows students to combine existing campus courses in unique ways. Neither is it a form of cooperative education, with traditional courses and credit hours supplemented by field work. It embodies all the elements of experiential learning about which I've been writing, and more. Unlike most institutionally based innovation, CWW goes beyond moderate departure from standard operating procedure. As Mark Rosenman points out,

> "Such innovation reflects nothing more than modifications in the 'delivery system' (if I may be permitted the editorial efficiency of that term without political support for it) for the established institutionalized view of higher education. This is true of most 'external degree' programs, the major category or classification for such institutionally based innovation. Thus, it is usually not fundamental change in the nature of the higher educational process or goals which is sought from such alternatives, it's simply different ways of 'delivering' it.... The UWW, on the other hand, represents innovation on a much more significant level than alternative 'delivery systems.' It challenges most of the basic concepts which undergird both the form and the content of higher education in this nation" (1975, p. 15).

Clearly, the sources of CWW are the same criticisms of traditional education which I have been referring. William Glasser (although he prescribes a school-based model of reform, rather than experiential learning) expresses several of these points effectively:

"Today much of what we call education is merely knowledge gathering and remembering. Problem solving and thinking, never strong parts of our educational system, have been downgraded.... At all levels of education we have now an intense effort, perhaps reaching its peak in college and graduate school, to program people with predictable knowledge in the same way our computers are programmed.... Education emphasizes a lesser function of the human brain, memory, while relatively neglecting its major function, thinking" (1969, p. 35).

And further:

"Fact-and-answer-centered education usually settles down to a struggle between teachers and pupils. The teachers have a clear upper hand in the struggle because they know the answers to the questions they ask.... When our schools begin to train students to make and implement decisions, facts will fall into place as an important part, but only a part, of problem solving and decision making" (p. 79).

"Memory is not education, answers are not knowledge. Certainty and memory are the enemies of thinking, the destroyers of creativity and originality" (p. 38).

"It is no wonder, therefore, that the memorization so prized in current education leads to boredom for those who are successful and to frustration and misery for those who are not. Memorizing facts cannot provide a deep-seated feeling of satisfaction--a feeling possible only when a student uses his brain to think and thus arrive at an answer or an alternative that solves a problem relevant to his life and to his society.... We depend more and more upon external motivators--exhortations, grades, threats, punishments, and even suspensions--for those who fail to memorize at a level considered adequate by their schools, their parents, or themselves" (p. 40).

Thus, the College Without Walls program emanates from a concern about:

(1) student learning--which some educators have arbitrarily defined as occurring only inside the four walls of a college campus after "X" hours of lecturing,

(2) the depersonalization of education resulting from rapid growth and impersonal, bureaucratic organization,

(3) the inability of mass education to continuously stimulate the uniqueness of each student,

(4) the traditional preoccupation with the dissemination of information in classrooms rather than the learning of students,

(5) the imposition of external controls rather than the nurturing of internal, student-conceived patterns of growth and development,

(6) the inflexibility of higher education, which, out of an understandable desire to provide uniform excellence, has in turn provided uniform definitions for: the period of learning (semesters, quarters), the place (classrooms), the method (sitting passively, writing, and listening to lectures), and the curriculum (sequences of required courses with limited student options),

(7) an inordinate stress on data storage and retrieval--or in some curricula on psychomotor skills--at the expense of that vital interpersonal learning so crucial to personal and career success, and

(8) the regimentation and passiveness imposed on students to the exclusion of active, participative, experiential learning (that is, the notion of the community as a laboratory for learning).

So the development of self-directed persons, able to think and feel and create, is the purpose of CWW. Its commitment to the full cognitive and affective growth of its students, as Rosenman states, is probably the "primary line distinguishing it from the mainstream of higher education today" (1975, p. 15). In stressing the affective side of development, the designers of College Without Walls assume "that a more mature individual, one closer to autonomy and self-actualization, is somehow a 'better' person and a 'better' member of society" (p. 15).

The University Without Walls: A First Report continues in the same vein:

> "It moves toward a new faith in the student and his capacity for learning on his own, while at the same time providing close and continuing contact between the student and teacher. It redefines the role of the teacher as a facilitator and co-participant in the planning and design of the student's learning experience.... It seeks to build highly individualized and flexible programs of learning and makes use of new and largely untapped resources for teaching and learning" (1972, p. 1).

Inspiration

The University Without Walls was and is inspired by the Union for Experimenting Colleges and Universities, which is based in Cincinnati, Ohio. The Union was established in 1964 at Antioch College, Yellow Springs, Ohio as a consortium of institutions interested in experimentation and is supported by member-institution fees and grants from nationally prominent foundations. In 1971 20 institutions launched UWW programs; by the fall of 1975 27 institutions were participating. Currently, more than 30 institutions are members. Most are four-year colleges and universities, such as the University of Massachusetts, Stephens College, and Governors State University.

The pioneering work of the Union in designing and developing the UWW was spearheaded by Dr. Samuel Baskin, its president through 1976 and current director of the Goodwin-Watson Center for Educational Research in Yellow Springs, Ohio, a component of the Union for Experimenting Colleges and Universities. Dr. King Cheek, formerly president of Morgan State University, has assumed the chief executive position of the Union.

The Union views itself as a "catalyst for change" in higher education (see Appendix C for a more complete description of the mission and function of the Union); it is not only a consortium but also a degree-granting institution. It provides University Without Walls programs at the baccalaureate and graduate levels. Its purpose, in a nutshell, is to purvey "learner-centered, individualized, experiential education."

Thus, the viability of the University (and College) Without Walls has been demonstrated in 30 institutions. Unfortunately, only a few of these are two-year colleges (Staten Island Community College is one). Curiously, although there has been relatively widespread support in community colleges for programs of sponsored experiential learning, nontraditional teaching modes, and more student-centered and flexible curricular components, the CWW concept has received its greatest support from America's most prestigious universities

(traditionally considered stuffy, ivory tower, and teaching-centered). The irony of this is quite perplexing.

Let us come down now from abstract descriptions to the actual details of a CWW program.

Degree Sequence

The steps described here are those of the Colleges Without Walls program of Sinclair Community College. Although its design closely adheres to the Union for Experimenting Colleges and Universities Guidelines, it differs in that the two-year college omits the "project demonstrating excellence," which involves the preparation of a complex piece of work (such as a publishable manuscript, a musical composition, or a market research study). This project and a longer list of degree goals are the primary differences between associate and baccalaureate programs. Other Colleges (and Universities) Without Walls, in practice, vary greatly in their operations. Persons interested in this degree structure should contact the Union for Experimenting Colleges and Universities and visit colleges offering such a program.

Admissions. The College Without Walls program is not for all students. Because a great deal of energy, motivation, and commitment is required, careful screening is necessary. Each applicant supplies a complete record of his/her past experience and learning a full description of personal, occupational, educational, and other goals. The strengths and weaknesses of the applicant are set forth in conjunction with a description of his or her learning style. An Admissions Committee then reviews the application to determine whether there is satisfactory congruence between the student's learning style and CWW requirements. From this pool of applicants, certain ones are selected to be interviewed, and then the committee makes a judgment regarding admission. The forms associated with this procedure are presented in Appendix D.

Intellectual ability, as measured by ACT or SAT or as presented in glowing academic reports, is not a primary selection standard. The committee places a greater premium on a serious desire to learn

and an ability to work independently of highly structured or classroom settings. Those whom they believe would be better served by traditional instruction methods are advised accordingly. Although self-direction is a primary concern, other factors weigh heavily too, such as the student's ability to conceptualize his/her aspirations, the contexts of his/her prior experiential learning, the plans the person has formulated already, and when he or she expects to complete the degree. Creativity is another criterion.

Because self-direction, the major consideration, is not limited to particular social, sexual, age, or income classifications, the admissions practices are not elitist. Any of a range of behaviors (such as survival in the ghetto, street-fighting) could be viewed as possible indicators of the ability to direct oneself. Thus, CWW students are a heterogeneous group, even though they have been admitted after a selection procedure.

Conference Between the Student and the "Core" Faculty Person. After being admitted, the new student begins a series of meetings with the College Without Walls core faculty. They discuss the particulars of the student's prior experiential learning and his/her aspirations and tentative goals. The core faculty person orients the student to the College Without Walls process, and they continue their talks until all the abilities and kinds of knowledge the student hopes to gain have been written down. The core faculty member, acting as teacher, counselor, friend, and advisor, is responsible for helping the student all the way, from committee formation through final assessment.

Developing the Preliminary Learning Compact and Establishing Group Ties. This is a crucial phase in the CWW process. The learning compact is a living document which continually undergoes revision and modification. In preparing it, the student consults with his/her core faculty member and gets suggestions from other students too. The activity is necessarily highly personal, but some of the work is done in a special class for entering students. As

they help each other write their compacts, they develop an important sense of community.

This phase includes dinner meetings in local restaurants and a group-planned outing, a series of informal sessions at the house of the core faculty member to share hopes, anxieties, and aspirations, orientation regarding the College Without Walls, and individual and group sharing of learning intents and culminates in individually conceived learning compacts.

This preliminary compact establishes broad learning outcomes, activities designed to produce these outcomes, and mechanisms for assessing the learning. The student is provided with a Directory of Learning Experiences with which he/she may plan a program. This document describes the range of learning resources available to the student in the immediate community. At this time the student begins to create a portfolio of prior experiential learning which will later be assessed to determine its impact on the overall degree requirements. The portfolio is to be updated and maintained throughout the program, reflecting all new learning and the circumstances of that learning.

Formation of the Degree Committee. With the assistance of the faculty person, the student nominates his/her degree committee. The committee consists of six persons: the student, the core faculty member, two College Without Walls peers, and two adjunct faculty members. The purpose of the committee is multi-faceted: to guide the student's program of study, to oversee the development of the learning compact, to act as a support group for the student-learner, to set up quality control mechanisms, and to assess the student's performance.

The peers are nominated from the student's entering class. The adjunct "faculty" comprises persons expert in one or more of the student's primary fields of competence (see the Adjunct Professor Nomination Form in Appendix D). These persons need not be academicians, and in fact the student is encouraged to consider informed and educationally sensitive practitioners. The primary criteria for the

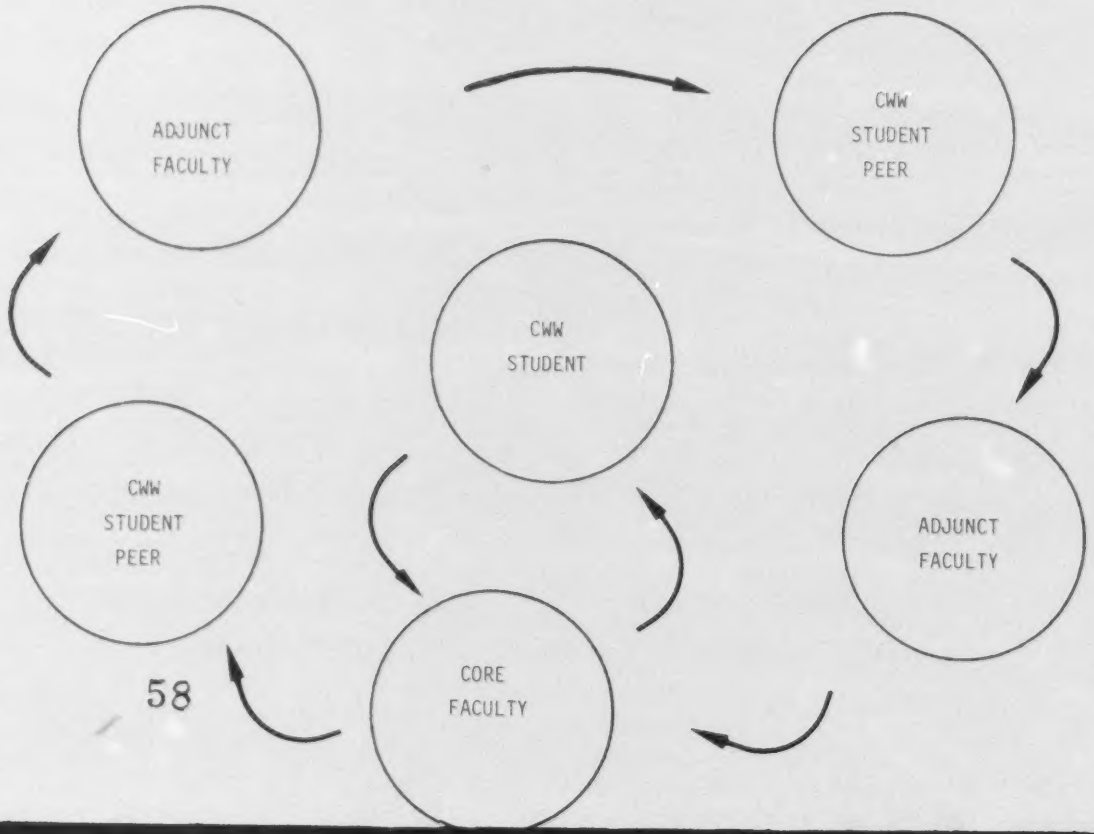
selection of adjuncts are their expertise and willingness to convene periodically to review and monitor the student's learning. The adjuncts are responsible for one of the student's field experiences. Final approval of the committee make-up is given by the core faculty member. Position Descriptions for persons involved in the CWW process are presented in Appendix E, and their relationship to the student is visually portrayed in Figure 3.

Formulation and Presentation of Final Learning Compact. The learning compact is, in effect, a degree plan, setting forth a series of actions and a schedule of completion. Once the student and his/her core faculty are convinced that the compact is as thorough as it can be for the present, the student submits it to the degree committee, which must approve it.

The compact first presents the student's goals in three "competence areas" dealing with communications skills, social and civic abilities, and occupational objectives--exploration, preparation, upgrading, or retraining. (See Appendix F for a more complete account of these areas.)

The second major component of the compact is the series of learning experiences the student intends to have in order to achieve the stated goals. These experiences are far more heterogeneous than those in traditional programs. Various types of field work--including paid and volunteer work assignments, dialogues with community practitioners, observations of crucial community endeavors--and travel are undertaken. Reading lists, tape-recorded or videotaped interviews, independent study projects, and special reports and themes which may be prepared away from the campus are other alternatives. Those inclined to classroom study may elect to enroll in on-campus courses at the community college or take advantage of any other educational services financially and geographically accessible to them (such classes offered by private industry or the armed services).

FIGURE 3
CWW DEGREE COMMITTEE



Assessment procedures are also to be identified in the compact, since the program's integrity cannot be maintained without validation and documentation of all learning. Self-evaluation is stressed.

Initiate Learning Activities. Once the compact is approved, the student begins his program by participating in several group workshops, called foundation workshops, which focus on the CWW process, provide guidelines on portfolio development, and develop the communications skills specified in the competence statements. These "lab" sessions make use of various media, and their schedule is flexible.

All field experiences are designed to achieve particular learning outcomes, which are in turn part of the degree plan; logs, reports, and projects are written about the field experience, and the core faculty person checks the student's progress by making periodic visits. Learning exercises involving essay writing, reading programs, or independent study may be coordinated by the core faculty member or other assigned college faculty members (called mentors). All planned activities and the learning which results are recorded by the student in his/her portfolio. The student controls a fund (approximately $400) which is used to underwrite learning experiences.

Assessment. A basic premise of the College Without Walls program is that all learning that occurred before the student entered the program and that serves the student's degree goals should be recognized. To that end, the student presents and documents all prior learning in the portfolio at the same time that he or she prepares the learning compact. The assessment of the portfolio will help to determine what learning exercises the student undertakes. Similarly, the evaluation of on-going learning activities may stimulate the revision of future plans. So the assessment process is not a neat series of steps but a kind of feedback system.

Current learning, as presented in the portfolio, is evaluated by the college-wide faculty person. All faculty participants are reimbursed under a cost-effective fiscal model. The student's degree committee acts as the overseer, meeting periodically to ensure that

the student is completing the learning compact and developing the designated abilities. Since demonstrated competence is the criterion of success, traditional grades are purposely forsaken. As Glasser notes, "the kind of education offered (relevance and thinking) and the way it is offered (involvement) have much more to do with incentive than grades" (1969, p. 95). He laments that grades "have become a substitute for learning, the symbols replacement for knowledge. One's transcript is more important than one's education" (p. 6[illegible].

Occasionally, the student may be asked to express orally or in an essay test what he or she has learned. Objective tests are seldom used. The most important forms of evidence are on-site assessments, projects, term papers, employer reports, recorded interviews, photographic essays, and the like. When all learning exercises have been completed successfully, the degree committee makes the final assessment, whose form is determined by the committee.

A narrative transcript is frequently used in CWW programs, although a conventional transcript identifying course equivalents (to the competences developed) may be provided. The nontraditional nature of the degree and ironically, and probably more important, the "look" of the transcript greatly influence the transferability of the degree. Community college CWW students are well advised to consider University Without Walls baccalaureate programs to facilitate transfer and to maintain the continuity and integrity of their learning endeavor.

The CWW Concept

Traditional patterns of schooling can be so damning, so stifling, so restrictive. Lecture listening, obedient sitting, note taking, exam passing, and grade accumulating can all too often circumvent learning. In some CJCs, learning how not to learn has been developed to the "nth" degree. The enthusiasm for learning so evident in the preschooler is methodically directed. Glasser asks,

> "What made the child so successful and so optimistic prior to entering school? He was successful because he used his brain to solve problems relevant to his life;

> he was optimistic because he had a lot of fun. He discovered that, although reality may be harsh, he could find ways to cope with it, ways that for the most part were successful. Most important, however, even when he failed, he was not labeled a failure; one way or another, harshly or lovingly, he was shown a better way. Even if his parents could not explain exactly why they wanted him to behave in certain ways, most of what he was asked to do was at least somewhat understandable. He was given many chances so that eventually he usually succeeded, but he was never asked to succeed according to rigid time standards such as school years or semesters. He learned to use his brain for its basic function: thinking. Certainly he cried, screamed, had tantrums, did foolish things, and was upset many times a day, but he did not make irrationality a way of life (even if it seemed so to his parents!). Outside his home he was less emotional and more reasonable because he soon learned where tantrums paid and where they didn't" (1969, p. 29).

The CWW model attempts to return to a simpler, less bureaucratic, and more individually-centered mode of education. The following description of the contrast between CWW and traditional education is adapted from John Bear's work (1975).

Although CWW has great potential for liberating education for many possible clients, especially adults, it also has some pitfalls which curriculum planners need to be sensitive to. The North Central Association's report of their accreditation visit to the Union for Experimenting Colleges and Universities' UWW programs suggests several problem areas.

(1) They expressed a concern about providing personal attention as student enrollment grows.

(2) The concept has not had a chance to show the economy of numbers it hopes to demonstrate in the future (note that the evaluation was conducted in 1972 and that by 1976 more than 6,000 students were participating in UWW programs).

(3) In some programs proper financing wasn't provided.

(4) The program director, having a thorough understanding of the numerous and unique program dimensions, may become so necessary that his or her loss could greatly jeopardize program continuity (Barrett and Others, 1972, p. 9).

TRADITIONAL DEGREE PROGRAM	THE COLLEGE WITHOUT WALLS
Awards degrees on the basis of time served, credits earned.	Awards degrees on the basis of demonstrated competence and skills attained.
Requirements for degree based on medieval principles: some general education, some specialization.	Requirements for degree agreed upon by student and faculty members; aimed at helping student achieve his/her career or personal goals.
Degree awarded when student meets certain numerical requirements.	Degree awarded when student's actual competence reaches agreed-upon levels.
Considers the classroom as the primary locus of instruction and the campus as the center of learning.	Sees the campus as a somewhat specialized, detached segment of the world. Any part of the world may be appropriate for certain kinds of learning.
Learning resources viewed almost exclusively as printed material and professional educators.	The range of learning resources is virtually infinite and certainly includes involvement with the physical and social world.
Faculty members must have appropriate degrees.	Competence and personal qualities of faculty members far more important than their degrees.
Faculty member sees self primarily as transmitter of information and knowledge.	Faculty member sees self primarily as a counselor and an expediter of learning.
Testing, awarding of credits and degrees depend almost exclusively on mastery of course content.	Learning how to learn and affective learning are as important as cognitive learning for full development of individual.
Cultivates dependence on authority through prescribed curricula, required campus residence, compulsory class attendance.	Cultivates self-direction and autonomy through planned independent study, on and off campus.
Curricula predominantly oriented toward traditional disciplines and well-established professors.	Student's program, reflecting his/her needs and goals, is likely to be problem-oriented, issue-oriented, world-oriented.

Nevertheless, the North Central examining team found students "very positive" about their experience and "enthusiasm and a sense of unison pervade the whole community." They observed "really meaningful education to people of all ages off the campus and outside the classroom. The education is not bound by a prescribed curriculum." Continuing: "Because no two students are alike, no two are following the same program. And, no longer time-tied, their education is goal oriented. UWW is clearly doing what it set out to do. And what it set out to do is no minor modification, no mere gimmickery" (Barrett and Others, 1972, pp. 9-10).

In summary, the following seem to be the essential characteristics of CWW:

(1) extensive and various off-campus experiences, including travel, paid work positions, volunteer services, community surveys and studies, and observation of pertinent decision-makers--all related to the student's intended educational objectives.

(2) the development early in the program of a comprehensive sequence of competences goals, which are committed to paper by the student with the direction of a special CWW degree committee; these desired abilities form the basis of the associate degree program as well as suggest the scope of the student's learning activities.

(3) individualization of learning; the student defines his or her learning outcomes as he conceives and writes down his goals and plans learning activities (with the assistance of the degree committee).

(4) an emphasis on supporting, supervising, and assessing student learning in any of a variety of locations (such as in the home, at work, and in a community service agency) rather than on disseminating information in classrooms.

(5) stress on self-directed learning, which requires students to be intensely involved in a program of individualized reading, viewing, writing, listening, and participating.

(6) a fluid programming without a fixed curriculum or uniform schedule, allowing students to progress at varying rates and in varying directions.

A Postscript: Where To See It in Action

The Community College of Vermont is a pioneer among two-year colleges providing external degree opportunities; the Vermont model

contains numerous CWW elements. The CWW design presented in this paper is being implemented by Sinclair Community College in Dayton, Ohio. Staten Island Community College, while not currently offering a CWW program, has provided this alternative in the past.

> *Schools are legally compulsory, not voluntary; age bound, not lifelong; subject centered, not person centered; book oriented, not experience oriented; teacher centered, not learner centered; competitive, not collaborative; bureaucratically fixed on grades, credits, and diplomas, not mastery oriented; controlling of behavior, not responsive to needs; invidious and advantageous, not equalizing and compassionate.*
>
> *Ronald Gross (1973)*

APPENDICES

APPENDIX A

SINCLAIR COMMUNITY COLLEGE STATEMENT OF WORK/LEARNING OUTCOMES

Student_____ Employer_____ Date_____

Your internship is a valid learning experience to the degree that the college provides adequate training and guidance, the employer provides supervision, and you set about the task of understanding and managing the nature of the work and accomplishing various work/learning outcomes. In the following spaces, with the input of your supervisor, specify learning outcomes for this work period; then make an appointment with your faculty-coordinator on-campus to review and modify as necessary these learning outcomes. At the end of the quarter both you and your employer will evaluate the achievement of the outcomes, in the space provided, using the following rating scale.

Rating Scale

0 = Not observable
1 = Limited accomplishment
2 = Average accomplishment
3 = Better than average accomplishment
4 = Far exceeds average accomplishment

	Evaluation of Outcomes	
	Student	Employer
1._____		
_____	_____	_____
2._____		
_____	_____	_____
3._____		
_____	_____	_____
4._____		
_____	_____	_____

We, the below signed, agree with the suitability of the work/learning outcomes specified above (to be signed at the beginning of the internship period).

Supervisor_____

Faculty_____

Student_____

Note to student: Please return the completed form to your coordinator during the 10th week of the term along with the internship report.

General evaluation of work performance by employer (please comment on the overall performance of the student-employee, including perhaps: attitude, punctuality, effectiveness, human relations, decision making ability, and dependability).

_____

_____

_____

_____

_____

(Use the reverse side of this form for additional comments)

APPENDIX B
CLEP EXAMINATIONS

When experiential learning and knowledge are closely related to traditional courses at the college level, the College Level Examination Program (CLEP) can be used to measure student achievement. CLEP has examinations in the following areas:

CLEP General Examinations

English
Humanities
Mathematics
Natural Sciences
Social Sciences/History

CLEP Subject Areas

Social Sciences

Afro-American History
American Government
American History
General Psychology
Introductory Economics
Introductory Sociology
Western Civilization

Natural Sciences

Biology
General Chemistry
Geology

Humanities

American Literature
Analysis & Interpretation of Literature
English Composition
English Literature
Freshman English

Mathematics

College Algebra
College Algebra - Trigonometry
Introductory Calculus
Statistics
Trigonometry

Business

Computers & Data Processing
Elementary Computer Programming: Fortran IV
Introductory Accounting
Introductory Business Law
Introduction to Business Management
Introductory Marketing
Money and Banking

Education

Educational Psychology
History of American Education
Human Growth and Development
Tests and Measurements

Medical Technology

Clinical Chemistry
Hematology
Immunohematology & Blood Banking
Microbiology

APPENDIX C
THE UNION FOR EXPERIMENTING COLLEGES AND UNIVERSITIES

The Union for Experimenting Colleges and Universities has been organized as both a consortium and a degree-granting institution in its own right. *Its primary mission is to serve as a catalyst for creative change in higher education by:*

(1) developing new learning methods and resources;

(2) developing prototype innovative programs and institutions;

(3) developing programs to meet the needs of student populations previously denied access to higher education;

(4) assessing the effectiveness of new educational models;

(5) disseminating information about these models to the higher education community;

(6) expanding the Union's models into the international sphere;

(7) encouraging personalized, humane educational programs;

(8) helping member institutions effect new ideas and program innovations within their own settings;

(9) influencing social policy and legislation critical to the development and maintenance of alternative educational models;

(10) building the most powerful educational coalition possible to promote positive change.

The foregoing objectives are the concern of both the consortium of individual member institutions and the Union for Experimenting Colleges and Universities itself as a free-standing institution with responsibilities for undergraduate and graduate degree programs.

As a consortium, the aims of UECU are:

- to promote learner-centered, individualized, experiential field-based educational approaches;
- to support creative change within its membership;
- to facilitate and support new educational enterprises and programs addressed to meet the needs of previously disenfranchised persons;
- to develop and implement cooperative programs and projects between its members;
- to provide a meeting ground for a diversity of persons, institutions, and agencies with common values and purposes;
- to provide a forum for the exchange of ideas among its members;

- to encourage methods of solving social problems;
- to influence public policy, consistent with its mission and purposes.

As a degree-granting institution, it seeks:

- to provide learner-centered, individualized, experiential, field-based education at the baccalaureate and graduate levels to individual learners;
- to provide support services and degree-granting capabilities to independent groups whose purposes, methods, and policies are consistent with those of UECU;
- to establish policies and procedures to ensure the quality of its affiliated programs;
- to facilitate and/or coordinate cooperative projects among its affiliates;
- to coordinate evaluation, research, and accreditation activities among its affiliates;
- to gather, publish, and disseminate information about its programs and projects;
- to assist innovative educational enterprises in their development.

As part of a movement, UECU:

- exchanges information with other alternative, nontraditional education efforts (such as the British Open University, New York Regents' External Degree Program, Empire State University, Minnesota Metropolitan State College, and CLEP);
- participates in those national and international efforts to promote and facilitate the growth and development of alternative, nontraditional education;
- is part of that vast "invisible network" of persons, in a variety of institutions and agencies, seeking to humanize our society and to better meet the needs of individuals.

APPENDIX D

MISCELLANEOUS CWW FORMS

COLLEGE WITHOUT WALLS APPLICATION FORM

NAME _____ ADDRESS _____
HOME PHONE NO. _____ WORK PHONE NO. _____

Personal, educational, and career goals: _____

Brief biographical description: _____

Prior schooling: _____

Self-initiated study: _____

Work experience: _____

Volunteer work: _____

Community involvement: _____

Associations/memberships: _____

Avocational interests: _____

Rationale for application in CWW (indicate why your objectives cannot be met by entering in one of the college's regular programs): _____

_____

_____

_____

Strengths and weaknesses: _____

_____

_____

_____

_____

_____

References:

	NAME	TITLE	WORK PHONE NO.
1)	_____		
2)	_____		
3)	_____		
4)	_____		
5)	_____		

CWW ADMISSIONS COMMITTEE
ASSESSMENT FORM FOR CWW PROGRAM APPLICANTS

Name of applicant _____

Date _____

Self-Direction Appraisal

	Intensity of Involvement (Please Check)
1) Initiated a program of self-study Specify: _____	High ___ ___ ___ ___ ___ Low
2) Successful work history Specify: _____	High ___ ___ ___ ___ ___ Low
3) Involvement in community projects Specify: _____	High ___ ___ ___ ___ ___ Low
4) Success in nontraditional endeavor Specify: _____	High ___ ___ ___ ___ ___ Low
5) Participation in volunteer work Specify: _____	High ___ ___ ___ ___ ___ Low
6) Clear perception of personal, career, educational objectives Specify: _____	High ___ ___ ___ ___ ___ Low
7) Participation in workshops, conferences, etc. Specify: _____	High ___ ___ ___ ___ ___ Low

8) Avocational interests and involvement — High ___ ___ ___ ___ ___ Low
Specify: _____
_____
_____

9) Family responsibilities and home management — High ___ ___ ___ ___ ___ Low
Specify: _____
_____
_____

10) Participation in other postsecondary education endeavors — High ___ ___ ___ ___ ___ Low
Specify: _____
_____
_____

_____ _____ _____ _____

Applicant's conviction about long-run self growth and achievement of personal goals — High ___ ___ ___ ___ ___ Low

Strengths of the applicant: _____
_____
_____
_____

Areas of concern: _____
_____
_____
_____

Areas of concern - checklist:

_____communication deficiency
_____evidences need for external controls
_____diminished self-concept
_____inflexibility of full-time work commitment
_____ambiguous life goals
_____life commitments which would limit full program involvement
_____desires transfer to traditional university baccalaureate program

Admission recommendation: _____approval
_____approval with qualifications
specify: _____
_____
_____
_____disapproval

Comments: _____
_____
_____
_____
_____
_____

Assessor signature: _____

CWW ADJUNCT PROFESSOR NOMINATION FORM

Submitted by CWW student (Name): _____
Date: _____

1) Proposed adjunct faculty member: _____

2) Professional responsibilities: _____
_____
_____
_____

3) Area of expertise related to your learning compact: _____
_____
_____
_____

4) Addresses (home and work): _____
_____
_____
_____

5) Academic training: _____
_____
_____
_____

6) Relationship to this person: _____
_____
_____
_____

Date: _____

Action taken: _____approval _____disapproval

Comments: _____
_____
_____
_____

APPENDIX E
CWW POSITION DESCRIPTIONS

1. Director
   A. assists in development of new CWW clusters in other areas of the college;
   B. oversees program operation;
   C. provides planning assistance to core faculty member;
   D. supervises core faculty person responsible for College Without Walls clusters;
   E. designs and produces public information materials about the College Without Walls;
   F. provides assistance in the admissions process (its development and administration).
2. Core Faculty Member
   A. has primary responsibility for supervising and assessing student learning;
   B. screens applicants to the program;
   C. conducts student orientation program;
   D. convenes the student's degree committee (at least twice a year);
   E. meets regularly with students (individually and in groups);
   F. helps students prepare their learning compact;
   G. guides students' preparation of the learning portfolio (for prior and sponsored learning);
   H. acts as a liaison between the student and the faculty mentors;
   I. develops field experiences for students (in conjunction with employment facilitators);
   J. places students in field experiences;
   K. supervises all off-campus learning of students (including field experiences);
   L. keeps thorough records on all experiences and learning development of students.
3. Adjunct Faculty Member (typically a community practitioner who donates time to his/her student)
   A. serves on the student's degree committee;
   B. oversees the development and implementation of the student's learning compact;

C. advises student on the development of learning experiences to support his/her goals;

D. assesses achievement of broad competence objectives as well as prior experiential learning;

E. supervises one of the student's field experiences.

4. Student Peer

A. serves on the student's degree committee;

B. reacts to and provides suggestions for the development of the learning compact;

C. advises student peer in ways useful to the development of the student's total growth.

5. Faculty Mentor (a regular faculty member on the Sinclair Community College staff who helps to individualize and assesses the experiences of CWW students; as many as seven mentors may participate for each student)

A. advises and periodically meets with individual CWW students in devising learning experiences leading to particular competences;

B. formulates pertinent learning experiences;

C. assesses learning of student;

D. reports to the student and core faculty person (in a letter) particular judgments regarding the value of the learning experience(s) and the evidence of learning.

6. Field Supervisor (typically a local practitioner who agrees to supervise a CWW student in a "real-world" work experience designed to achieve specific abilities)

A. supervises the successful completion of work tasks;

B. suggests ways to develop the designated skill;

C. acts as the student's supporter;

D. meets periodically with the student and core faculty member to review the student's growth;

E. evaluates the student's learning progress.

7. Community Resource Persons

8. Collegewide Faculty

9. Learning Resource Staff Assistants

The last three (7,8, and 9) fill a variety of roles, from time to time, in the direction and assessment of student learning.

APPENDIX F
COMPETENCE GOALS

Communications Competence

You should be both an effective receiver and a skillful sender of information. Messages may be written, oral, or nonverbal, and you may need to demonstrate your ability to handle all three. The symbols or languages you may need to learn include: standard English, technical English, mathematics, statistics, accounting, computer languages such as fortran and cobol, and foreign languages, such as Spanish. The specific symbol systems you must master will be determined by your career, personal, or other goals. In short, learning to communicate effectively will be a part of almost everything you do. Every learning activity you engage in will require you to be either an effective sender or an effective receiver of communications.

Social/Citizenship Competence

As a self-directed learner, you especially need the ability to look at yourself, to identify your strengths and limitations, to be able purposefully to set goals as a result of taking inventory, and to plan and carry out strategies for realizing those goals. The cultivation of these skills also requires social awareness--knowledge of the social patterns, mores, and customs of your own background and the backgrounds of others. What you know about groups and individuals and how they function will help you to clarify your own values. In a similar way, clarifying your own values will help you understand and evaluate others'. By participating in the wide array of activities of secular and nonsecular groups, you as a citizen can contribute to the civic process. Knowledge and analysis of economic, cultural, religious, and social decisions make possible informed citizenship.

Occupational Competence

You must have the knowledge and skills necessary to be an effective, useful, and productive worker with the potential of achieving

meaningful personal development and self-esteem. You should be familiar with the range of career opportunities in your field, because only you can choose your career. Part of your studies at Sinclair Community College will be designed to help you develop occupational skills useful to your personal achievement and growth and to your effectiveness as a practitioner in your chosen field.

BIBLIOGRAPHY

Barrett, L., and Others. Report to a Visit to the University Without Walls by the Union for Experimenting Colleges and Universities - Yellow Springs, Ohio, May, 1972 for the Commission on Institutions of Higher Education of the North Central Association of Colleges and Secondary Schools. Chicago, Ill.: North Central Association of Colleges and Secondary Schools, 1972. 26pp. ED 083 909.

Baskin, S. "Innovation in Higher Education: Developments, Research, and Priorities." New Dimensions in Higher Education, No. 19. Durham, N.C.: Duke University and Washington, D.C.: U.S. Office of Education, 1967.

Bear, J. College Degrees by [illegible]. Little River, Calif.: Rafton and Bear, 1975.

Biester, J.T. "Variations in Off-Campus Programs." Journal of Cooperative Education, 6 (2): 53-57; May, 1970.

Bloom, B.S., and Others. Taxonomy of Educational Objectives. Handbook I: Cognitive Domain. New York: David McKay Co., 1956.

Breen, P.; Donlon, T.F.; and Whitaker, U. Learning and Assessing Interpersonal Competence--A CAEL Student Guide. Princeton, N.J.: CAEL/Educational Testing Service, 1977a.

Breen, P.; Donlon, T.F.; and Whitaker, U. Teaching and Assessing Interpersonal Competence--A CAEL Handbook. Princeton, N.J.: CAEL/Educational Testing Service, 1977b.

Cohen, A.M. Dateline '79: Heretical Concepts for the Community College. Beverly Hills, Calif.: Glencoe Press, 1969.

Cooperative Assessment of Experiential Learning, Project Status Report. Princeton, N.J.: Educational Testing Service, 1976.

Cross, K.P. The Integration of Learning and Earning: Cooperative Education and Nontraditional Study. Washington, D.C.: American Association for Higher Education and ERIC Clearinghouse on Higher Education, 1973. 70pp. ED 080 100.

Dale, E. Audiovisual Methods in Teaching. New York: Holt, Rinehart and Winston, 1969.

Dawson, J.D. "Community and Junior College Programs." In A.S. Knowles and Associates, Handbook of Cooperative Education. San Francisco: Jossey-Bass, 1971.

Dawson, J.D. "New Directions for Cooperative Education." Speech given to the Annual Convention of the Insurance Directors' Society, June 1972.

Dube, P.E. "Cooperative Education in the Social Sciences and Humanities for Colleges Implementing New Programs." Journal of Cooperative Education, 8 (1): 18; May 1971.

Forrest, A. Assessing Prior Learning--A CAEL Student Guide. Princeton, N.J.: CAEL/Educational Testing Service, 1977.

Forrest, A.; Knapp, J.E.; and Pendergrass, J. "Tools and Methods of Evaluation." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Glasser, W. Schools Without Failure. New York: Harper & Row, 1969.

Harnett, R.T. "Non-Traditional Study: An Overview." In S.B. Gould and K.P. Cross (Eds.), Explorations in Non-Traditional Study. San Francisco: Jossey-Bass, 1972.

Heermann, B. Cooperative Education in Community Colleges. San Francisco: Jossey-Bass, 1973.

Houle, C.O. "Deep Traditions of Experiential Learning." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Illich, I.D. Deschooling Society. New York: Harper & Row, 1971.

Keeton, M.T. "Credentials for the Learning Society." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Knapp, J. Assessing Prior Learning--A CAEL Handbook. Princeton, N.J.: CAEL/Educational Testing Service, 1977.

Knapp, J. A Guide for Assessing Prior Experience Through Portfolios. Princeton, N.J.: CAEL/Educational Testing Service, 1975.

Knapp, J., and Sharon, A.T. A Compendium of Assessment Techniques. Princeton, N.J.: CAEL/Educational Testing Service, 1975.

Kray, E., and Hultgren, L. Implementing and Financing Portfolio Assessment in a Public Institution. Princeton, N.J.: CAEL/Educational Testing Service, 1976.

Lewin, K. A Dynamic Theory of Personality. New York: McGraw-Hill, 1935.

Lindenmeyer, R.S. "A Comparison Study of the Academic Progress of the Cooperative and the Four-Year Student." Journal of Cooperative Education, 3 (2): 8-17; April 1967.

Lyons, C.C. "Experiential Education: One Point of View." In P. Meyer and S.L. Petry, Off-Campus Education: An Inquiry. Atlanta: Southern Regional Education Board, 1972. 21pp. ED 080 052.

McKinney, L.M. "Minority Students." In A.S. Knowles and Associates, Handbook of Cooperative Education. San Francisco: Jossey-Bass, 1971.

Martorana, S.V., and Kuhns, E. Managing Academic Change. San Francisco: Jossey-Bass, 1975.

Meyer, P. Awarding College Credit for Non-College Learning: A Guide to Current Practices. San Francisco: Jossey-Bass, 1975.

Moore, W., Jr. Against the Odds. San Francisco: Jossey-Bass, 1970.

Rosenman, M. "The University Without Walls: An Institutionalized Alternative." New Schools Exchange Newsletter, September 30, 1975, pp. 15-23.

Roueche, J.E., and Kirk R.W. Catching Up: Remedial Education. San Francisco: Jossey-Bass, 1973.

Sexton, R.F., and Ungerer, R.A. Rationales for Experiential Education. Research Report No. 3. Washington, D.C.: George Washington University and ERIC Clearinghouse on Higher Education, 1975. 57pp. ED 111 319.

Sikes, W.W.; Schlesinger, L.D.; and Seashore, C. "Developing Change Agent Teams on Campus." Journal of Higher Education, 44 (5): 399-413; May 1973.

Smith, H.S. "The Influence of Participation in the Cooperative

Program on Academic Performance." Journal of Cooperative Education, 2 (1): 7-17; November 1965.

Taylor, H. "Foreward." In P. Meyer, Awarding College Credit for Non-College Learning: A Guide to Current Practices. San Francisco: Jossey-Bass, 1975.

Trivett, D.A. Academic Credit for Prior Off-Campus Learning. Washington, D.C.: George Washington University and ERIC Clearinghouse on Higher Education, 197.. 80pp. ED 105 796.

Tumin, M. "Valid and Invalid Rationales." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

University Without Walls: A First Report. Yellow Springs, Ohio: Union for Experimenting Colleges and Universities, 1972. 52pp. ED 063 880.

Weathersby, G., and Henault, A.J., Jr. "Cost-Effectiveness of Programs." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Whitaker, U.G. "Assessors and Their Qualifications." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Willingham, W.W. "Critical Issues and Basic Requirements for Assessment." In M.T. Keeton and Associates, Experiential Learning. San Francisco: Jossey-Bass, 1976.

Wilson, J.W. "Survey of Cooperative Education, 1972." Journal of Cooperative Education, 9 (1): 9-15; November 1972.

Woodridge, R. Cooperative Education Today: A Reassessment. Paper presented at the CAEL Conference, New York, April 24-27, 1973.

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